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TKDHFLEVKM ESSKQHFFHL WNDPAYIEVD GKKYPSSEDG IQVVVIDGNQ GRVVSHTSFR   900
NSILQGIPWQ LFNYVATIPD NSIVLMASKG RYVSRGPWTR VLEKLGADRG LKLKEQMAFV   960
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Seq ID NO: 141 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 261..2861

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Seq ID NO: 142 Protein sequence
Protein Accession #: Eos sequence

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ERSWGHRGVI VHVIDPKSGT VIHSDRFDTY RSKKESERLV QYLNAVPDGR ILSVAVNDEG  240
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KDVVGYNSLG HCPFTEDGPE ERNTFDHCLG LLVKSGTLLP SDRDSKMCKM ITEDSYPGYI  660
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Seq ID NO: 143 NM DNA sequence
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Coding sequence: 38..2635

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Seq ID NO: 144 NP Protein sequence
Protein Accession #: NP_006008.1

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Coding sequence: 38..2605

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AACTCTATCA AATGTGATGG CTAGATTCTA ACATATTGCC ATGTGTGGAG TGTGCTGAAC  3000
ACACACCAGT TTACAGGAAA GATGCATTTT GTGTACAGTA AACGGTGTAT ATACCTTTTG  3060
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AAGTCACCAT TGACTTCTTG GTGCTGTTGA AAATAATCCA TTTTCACTAA AAGTGTGTGA  3180
AACCTACAGC ATATTCTTCA CGCAGAGATT TTCATCTATT ATACTTTATC AAAGATTGGC  3240
CATGTTCCAC TTGGAAATGG CATGCAAAAG CCATCATAGA GAAACCTGCG TAACTCCATC  3300
·TGACAAATTC AAAAGAGAGA GAGAGATCTT GAGAGAGAAA TGCTGTTCGT TCAAAAGTGG  3360
AGTTGTTTTA ACAGATGCCA ATTACGGTGT ACAGTTTAAC AGAGTTTTCT GTTGCATTAG  3420
GATAAACATT AATTGGAGTG CAGCTAACAT GAGTATCATC AGACTAGTAT CAAGTGTTCT  3480
AAAATGAAAT ATGAGAAGAT CCTGTCACAA TTCTTAGATC TGGTGTCCAG CATGGATGAA  3540
ACCTTTGAGT TTGGTCCCTA AATTTGCATG AAAGCACAAG GTAAATATTC ATTTGCTTCA  3600
GGAGTTTCAT GTTGGATCTG TCATTATCAA AAGTGATCAG CAATGAAGAA CTGGTCGGAC  3660
AAAATTTAAC GTTGATGTAA TGGAATTCCA GATGTAGGCA TTCCCCCCAG GTCTTTTCAT  3720
GTGCAGATTG CAGTTCTGAT TCATTTGAAT AAAAAGGAAC TTGG
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Seq ID NO: 146 Protein sequence
Protein Accession #:

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IFLYVVQPRD FPEDTLRKFL QKAYESKIDY DIVYYEAGII LCCVLGLLFI ILMPLVGYFF  120
CMCRCCNKCG GEMHQRQKEN GPFLRKCFAI SLLVICIIIS IGIFYGFVAN HQVRTRIKRS  180
RKLADSNFKD LRTLLNETPE QIKYILAQYN TTKDKAFTDL NSINSVLGGG ILDRLRPNII  240
PVLDEIKSMA TAIKETKEAL ENMNSTLKSL HQQSTQLSSS LTSVKTSLRS SLNDPLCLVH  300
PSSETCNSIR LSLSQLNSNP ELRQLPPVDA ELDNVNNVLR TDLDGLVQQG YQSLNDIPDR  360
VQRQTTVVA GIKRVLNSIG SDIDNVTQRL PIQDILSAFS VYVNNTESYI HRNLPTLEEY  420
DSYWWLGGLV ICSLLTLIVI FYYLGLLCGV CGYDRHATPT TRGCVSNTGG VFLMVGVGLS  480
FLFCWILMII VVLTFVFGAN VEKLICEPYT SKELFRVLDT PYLLNEDWEY YLSGKLFNKS  540
KMKLTFEQVY SDCKKNRGTY GTLHLQNSFN ISEHLNINEH TGSISSELES LKVNLNIFLL  600
GAAGRKNLQD FAACGIDRMN YDSYLAQTGK SPAGVNLLSF AYDLEAKANS LPPGNLRNSL  660
KRDAQTIKTI HQQRVLPIEQ SLSTLYQSVK ILQRTGNGLL ERVTRILASL DFAQNFITNN  720
TSSVIIEETK KYGRTIIGYF EHYLQWIEFS ISEKVASCKP VATALDTAVD VFLCSYIIDP  780
LNLFWFGIGK ATVFLLPALI FAVKLAKYYR RMDSEDVYDD VETIPMKNME NGNNGYHRDH  840
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Seq ID NO: 147 DNA sequence
Nucleic Acid Accession #: BC012089.1
Coding sequence: 236..2806

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GCTCTGAGGC AGGAGGCACC AAGTTCTACC TCATGTTTGG AGGATCTTGC TAGCTATGGC  240
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GACCCAAGAC TCCCATAAAG CTGGACCCAT TGGCATTCTC TTTGAACTAG TGCATATCTT  420
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CTACTTACTA AATGAAGACT GGGAATACTA TCTCTCTGGG AAGCTATTTA ATAAATCAAA  1860
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   5    TGACAGCTAC TTGGCTCAGA CTGGTAAATC CCCCGCAGGA GTGAATCTTT TATCATTTGC   2160
        ATATGATCTA GAAGCAAAAG CAAACAGTTT GCCCCCAGGA AATTTGAGGA ACTCCCTGAA   2220
        AAGAGATGCA CAAACTATTA AAACAATTCA CCAGCAACGA GTCCTTCCTA TAGAACAATC   2280
        ACTGAGCACT CTATACCAAA GCGTCAAGAT ACTTCAACGC ACAGGGAATG GATTGTTGGA   2340
        GAGAGTAACT AGGATTCTAG CTTCTCTGGA TTTTGCTCAG AACTTCATCA CAAACAATAC   2400
  10    TTCCTCTGTT ATTATTGAGG AAACTAAGAA GTATGGGAGA ACAATAATAG GATATTTTGA   2460
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        GAATTTGTTT TGGTTTGGCA TAGGAAAAGC TACTGTATTT TTACTTCCGG CTCTAATTTT   2640
        TGCCGGTAAAA CTGGCTAAGT ACTATCGTCG AATGGATTCG GAGGACGTGT ACGATGATGT   2700
  15    TGAAACTATA CCCATGAAAA ATATGGAAAA TGGTAATAAT GGTTATCATA AAGATCATGT   2760
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        ACTGCTTGAG CATCAGGATA CTCAAAGTGG AAAGGATCAC AGATTTTTGG TAGTTTCTGG   2880
        GTCTACAAGG ACTTTCCAAA TCCAGGAGCA ACGCCAGTGG CAACGTAGTG ACTCAGGCGG   2940
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  25    TTTCTTCTAA ATGAGCTAAA TAAGTCACCA TTGACTTCTT GGTGCTGTTG AAAATAATCC   3360
        ATTTTCACTA AAAGTGTGTG AAACCTACAG CATATTCTTC ACGCAGAGAT TTTCATCTAT   3420
        TATACTTTAT CAAAGATTGG CCATGTTCCA CTTGGAAATG GCATGCAAAA GCCATCATAG   3480
        AGAAACCTGC GTAACTCCAT CTGACAAATT CAAAAGAGAG AGAGAGATCT TGAGAGAGAA   3540
        ATGCTGTTCG TTCAAAAGTG GAGTTGTTTT AACAGATGCC AATTACGGTG TACAGTTTAA   3600
  30    CAGAGTTTTC TGTTGCATTA GGATAAACAT TAATTGGAGT GCAGCTAACA TGAGTATCAT   3660
        CAGACTAGTA TCAAGTGTTC TAAAATGAAA TATGAGAAGA TCCTGTCACA ATTCTTAGAT   3720
        CTGGTGTCCA GCATGGATGA AACCTTTGAG TTTGGTCCCT AAATTTGCAT GAAAGCACAA   3780
        GGTAAATATT CATTTGCTTC AGGAGTTTCA TGTTGGATCT GTCATTATCA AAGTGATCA    3840
        GCAATGAAGA ACTGGTCGGA CAAAATTTAA CGTTGATGTA ATGGAATTCC AGATGTAGGC   3900
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Seq ID NO: 148 Protein sequence
Protein Accession #: AAH12089.1

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  FCMCRCCNKC GGEMHQRQKE NGPFLRKCPA ISLLVICIII SIGIFYGFVA NHQVRTRIKR   180
  SRKLADSNFK DLRTLLNETP EQIKYILAQY NTTKDKAPTD LNSINSVLGG GILDRLRPNI   240
  IPVLDEIKSM ATAIKETKEA LENMNSTLKS LHQQSTQLSS SLTSVKTSLR SSLNDPLCLV   300
  HPSSETCNSI RLSLSQLNSN PELRQLPPVD ABLDNVNNVL RTDLDGLVQQ GYQSLNDIPD   360
  RVQRQTTTVV AGIKRVLNSI GSDIDNVTQR LPIQDILSAF SVYVNNTESY IHRNLPTLEE   420
  YDSYWWLGGL VICSLLTLIV IFYYLGLLCG VCGYDRHATP TTRGCVSNTG GVFLMVGVGL   480
  SPLFCWILMI IVVLTFVFGA NVEKLICEPY TSKELFRVLD TPYLLNEDWB YYLSGKLFNK   540
  SKMKLTFEQV YSDCKKNRGT YGTLHLQNSF NISEHLNINE HTGSISSELB SLKVNLNIFL   600
  LGAAGRKNLQ DPAACGIDRM NYDSYLAQTG KSPAGVNLLS FAYDLEAKAN SLPPGNLRNS   660
  LKRDAQTIKT IHQQRVLPIE QSLSTLYQSV KILQRTGNGL LERVTRILAS LDFAQNFITN   720
  NTSSVIIEET KKYGRTIIGY PEHYLQWIEF SISEKVASCK PVATALDTAV DVFLCSYIID   780
  PLNLFWFGIG KATVPLLPAL IPAVKLAKYY RRMDSEDVYD DVETIPMKNM ENGNNGYHKD   840
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Seq ID NO: 149 DNA sequence
Nucleic Acid Accession #: NM_033049.1
Coding sequence: 28..1566

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  GAAACTGCGA CTAGTGGTCC TACAGTAGCT GCAGCTGATA CCACTGAAAC TAATTTCCCT    180
  GAAACTGCTA GCACCACAGC AAATACACCT TCTTTCCCAA CAGCTACTTC ACCTGCTCCC    240
  CCCATAATTA GTACACATAG TTCCTCCACA ATTCCTACAC CTGCTCCCCC CATAATTAGT    300
  ACACATAGTT CCTCCACAAT TCCTATACCT ACTGCTGCAG ACAGTGAGTC AACCACAAAT    360
  GTAAATTCAT TAGCTACCTC TGACATAATC ACCGCTTCAT CTCCAAATGA TGGATTAATC    420
  ACAATGGTTC CTTCTGAAAC ACAAAGTAAC AATGAAATGT CCCCCACCAC AGAAGACAAT    480
  CAATCATCAG GGCCTCCCAC TGGCACCGCT TTATTGGAGA CCAGCACCCT AAACAGCACA    540
  GGTCCCAGCA ATCCTTGCCA AGATGATCCC TGTGCAGATA ATTCGTTATG TGTTAAGCTG    600
  CATAATACAA GTTTTTGCCT GTGTTTAGAA GGGTATTACT ACAACTCTTC TACATGTAAG    660
  AAAGGAAAGG TATTCCCTGG GAAGATTTCA GTGACAGTAT CAGAAACATT TGACCCAGAA    720
  GAGAAACATT CCATGGCCTA TCAAGACTTG CATAGTGAAA TTACTAGCTT GTTTAAAGAT    780
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  CCAAGATCTG AAATGCGTGC TGATGACAAG TTTGTTAATG TAACAATAGT AACAATTTTG    900
  GCAGAAACCA CAAGTGACAA TGAGAAGACT GTGACTGAGA AAATTAATAA AGCAATTAGA    960
  AGTAGCTCAA GCAACTTTCT AAAACTATGAT TTGACCCTTC GGTGTGATTA TTATGGCTGT   1020
  AACCAGACTG CGGATGACTG CCTCAATGGT TTAGCATGCG ATTGCAAATC TGACCTGCAA   1080
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  AACGCACAGC ACAAGCAATG CTTAATAAAG AAGAGTGGTG GGGCCCCTGA GTGTGCGTGC   1200
  GTGCCCGGCT ACCAGGAAGA TGCTAATGGG.AACTGCCAAA AGTGTGCATT TGGCTACAGT   1260
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Protein Accession #: NP_149038.1

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ITASSPNDGL ITMVPSETQS NNEMSPTTED NQSSGPPTGT ALLETSTLNS TGPSNPCQDD   180
PCADNSLCVK LHNTSFCLCL EGYYYNSSTC KKGKVFPGKI SVTVSETFDP EEKHSMAYQD   240
LHSEITSLFK DVFGTSVYGQ TVILTVSTSL SPRSEMRADD KFVNVTIVTI LAETTSDNEK   300
TVTEKINKAI RSSSSNFLNY DLTLRCDYYG CNQTADDCLN GLACDCKSDL QRPNPQSPFC   360
VASSLKCPDA CNAQHKQCLI KKSGGAPECA CVPGYQEDAN GNCQKCAFGY SGLDCKDKFQ   420
LILTIVGTIA GIVILSMIIA LIVTARSNNK TKHIEEENLI DEDFQNLKLR STGFTNLGAE   480
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Seq ID NO: 151 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 87..914.

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AATTAAATAT TCGTAGAATT TCTAATGTAT CTCTTTGAGA CCTAGGAGGT TGATGGAACA 3300
GAACTGCTGT TAAGTCCTTT GGGTTTCAAG TCTAGAATTT TTTAAAGGCA AATATCAGCT 3360
CATTCTTATT TTAGATTGAC CTTATCAGGC ATGGATTCTG GTCTCATCTA CTTTATGGTA 3420
TAAATGCTCC AAGGTAGGGG GTTTGGTATA TATTTTAAGC CCGGCTTTTT TTTTTTTTTT 3480
TTTTTTTTTT TTTTTAATGT GAGAAGCAGA ATGTGCTTCT AGAAACTGGT TTTAAAGAGA 3540
TGAGCTGAGA AAGAAATGTG GAATGGAGTA TATTTGAGGA GGACAAAACA TAACTTCACT 3600
TTTGAACAGA AATCACTCTA GCTTGCCAGC ATGGGATGTA AACCAAGAGA GTAGAAATAT 3660
ACCCATCTTA TTTTAAGTTG GGTTTATGGC ATCGCTCATA TATGTAAAAG CACTACAAAC 3720
TCTTTAAAGA AAATTGGGAA ACTACAGAGA AGTCAAAGAA AAAAAAAGT AACCCATATT 3780
TCTATTGCCC AGGTATAATC CTTGTTAATA TTTTGGTTTG GTCTCCTCTT TTTTTCCCCC 3840
AATATAGTTG TAAATAAATG ATGTCTTTCA GAGTTGACAT TTATCCTGTA ˙GCTTGAATGG 3900
CATGTAAATG CCAGTTGTAT ATTTTTTCAT GAAGTGTAGG TTTGGAATAC ACTAGAGTTA 3960
GCTATATGCT TGAATGCTGA TCACTGGATT CTGAGACTGA CTACTGAGTC TACCTTTTTA 4020
ATCAAGCCTA ACATGAATGG GCTCCAAAAA GTAATGAATG TAATTGTACT TTTTGATGTG 4080
CCTCTGCACT TGGCTTGGTG AGTCATCATA AATAGCTGTT AAATATGTGA CTTTACAGAT 4140
TTTGATATGT TCAGATTGTA AAAAATGAAT AGTTTATTTC ATTAATTGAT GGGCAGTCAA 4200
GAATCTCCCT CC

Seq ID NO: 152 Protein sequence
Protein Accession #: Eos sequence

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 1          11         21         31         41         51
 |          |          |          |          |          |
MGAPHWWDQL QAGSSEVDWC EDNYTIVPAI AEFYNTISNV LFFILPPICM CLFRQYATCF    60
NSGIYLIWTL LVVVGIGSVY FHATLSFLGQ MLDELAVLWV LMCALAMWFP RRYLPKIFRN   120
DRGRFKVVVS VLSAVTTCLA FVKPAINNIS LMTLGVPCTA LLIAELXRCD NMRVFKLGLF   180
SGLWWTLALF CWISDRAFCE LLSSPNFPYL HCMWHILICL AAYLGCVCFA YFDAASEIPE   240
QGPVIKFWPN EKWAPIGVPY VSLLCANKKS SVKIT
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Seq ID NO: 153 DNA sequence
Nucleic Acid Accession #: NM_001432.1
Coding sequence: 167..676

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 1          11         21         31         41         51
 |          |          |          |          |          |
 TCACTTGCCT GATATTTCCA GTGTCAGAGG GACACAGCCA ˙ACGTGGGGTC CCTTCTAGGC    60
TGACAGCCGC TCTCCAGCCA CTGCCGCGAG CCCGTCTGCT CCCGCCCTGC CCGTGCACTC   120
TCCGCAGCCG CCCTCCGCCA AGCCCCAGCG CCCGCTCCCA TCGCCGATGA CCGCGGGGAG   180
GAGGATGGAG ATGCTCTGTG CCGGCAGGGT CCCTGCCGCTG CTGCTCTGCC TGGGTTTCCA   240
TCTTCTACAG GCAGTCCTCA GTACAACTGT GATTCCATCA TGTATCCCAG GAGAGTCCAG   300
TGATAACTGC ACAGCTTTAG TTCAGACAGA AGACAATCCA CGTGTGGCTC AAGTGTCAAT   360
AACAAAGTGT AGCTCTGACA TGAATGGCTA TTGTTTGCAT GGACAGTGCA TCTATCTGGT   420
GGACATGAGT CAAAACTACT GCAGGTGTGA AGTGGGTTAT ACTGGTGTCC GATGTGAACA   480
CTTCTTTTTA ACCGTCCACC AACCTTTAAG CAAAGAGTAT GTGGCTTTGA CCGTGATTCT   540
TATTATTTTG TTTCTTATCA CAGTCGTCGG TTCCACATAT TATTTCTGCA GATGGTACAG   600
AAATCGAAAA AGTAAAGAAC CAAAGAAGGA ATATGAGAGA GTTACCTCAG GGGATCCAGA   660
GTTGCCGCAA GTCTGAATGG CGCCATCAAA CTTATGGGCA GGGATAACAG TGTGCCTGGT   720
TAATATTAAT ATTCCATTTT ATTAATAATA TTTATGTTGG GTCAAGTGTT AGGTCAATAA   780
CACTGTATTT TAATGTACTT GAAAAATGTT TTTATTTTTG TTTTATTTTT GACAGACTAT   840
TTGCTAATGT ATAATGTGCA GAAAATATTT AATATCAAAA GAAAATTGAT ATTTTTATAC   900
AAGTAATTTC CTGAGCTAAA TGCTTCATTG AAAGCTTCAA AGTTTATATG CCTGGTGCAC   960
AGTGCTTAGA AGTAAGCAAT TCCCAGGTCA TAGCTCAAGA ATTGTTAGCA AATGACAGAT  1020
TTCTGTAAGC CTATATATAT AGTCAAATCG ATTTAGTAAG TATGTTTTTT ATGTTCCTCA  1080
AATCAGTGAT AATTGGTTTG ACTGTACCAT GGTTTGATAT GTAGTTGGCA CCATGGTATC  1140
ATATATTAAA ACAATAATGC AATTAGAATT TGGGAGAAGC AAATATAGGT CCTGTGTTAA  1200
ACACTACACA TTTGAAACAA GCTAACCCTG GGGAGTCTAT GGTCTCTTCA CTCAGGTCTC  1260
AGCTATAATT CTGTTATATG AGGGGCAGTG GACAGTTCCC TATGCCAACT CACGACTCCT  1320
ACAGGTACTA GTCACTCATC TACCAGATTC TGCCTATGTA AAATGAATTG AAAAACAATT  1380
TTCTGTAATC TTTTATTTAA GTAGTGGGCA TTTCATAGCT TCACAATGTT CCTTTTTTGT  1440
ATATTACAAC ATTTATGTGA GGTAATTATT GCTCAACAGA CAATTAGAAA AAAGTCCACA  1500
CTTGAAGCCT AAATTTGTGC TTTTTAAGAA TATTTTTAGA CTATTTCTTT TTATAGGGGC  1560
TTTGCTGAAT TCTAACATTA AATCACAGCC CAAAATTTGA TGGACTAATT ATTATTTTAA  1620
AATATATGAA GACAATAATT CTACATGTTG TCTTAAGATG GAAATACAGT TATTTCATCT  1680
TTTATTCAAG GAAGTTTTAA CTTTAATACA GCTCAGTAAA TGGCTTCTTC TAGAATGTAA  1740
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AGTTATGTAT TTAAAGTTGT ATCTTGACAC AGGAAATGGG AAAAAACTTA AAAATTAATA 1800
TGGTGTATTT TTCCAAATGA AAAATCTCAA TTGAAAGCTT TTAAAATGTA GAAACTTAAA 1860
CACACCTTCC TGTGGAGGCT GAGATGAAAA CTAGGGCTCA TTTTCCTGAC ATTTGTTTAT 1920
TTTTTGGAAG AGACAAAGAT TTCTTCTGCA CTCTGAGCCC ATAGGTCTCA GAGAGTTAAT 1980
AGGAGTATTT TTGGGCTATT GCATAAGGAG CCACTGCTGC CACCACTTTT GGATTTTATG 2040
GGAGGCTCCT TCATCGAATG CTAAACCTTT GAGTAGAGTC TCCCTGGATC ACATACCAGG 2100
TCAGGGAGGA TCTGTTCTTC CTCTACGTTT ATCCTGGCAT GTGCTAGGGT AAACGAAGGC 2160
ATAATAAGCC ATGGCTGACC TCTGGAGCAC CAGGTGCCAG GACTTGTCTC CATGTGTATC 2220
CATGCATTAT ATACCCTGGT GCAATCACAC GACTGTCATC TAAAGTCCTG GCCCTGGCCC 2280
TTACTATTAG GAAAATAAAC AGACAAAAAC AAGTAAATAT ATATGGTCCT ATACATATTG 2340
TATATATATT CATATACAAA CATGTATGTA TACATGACCT TAATGGATCA TAGAATTGCA 2400
GTCATTTGGT GCTCTGCTAA CCATTTATAT AAAACTTAAA AACAAGAGAA AAGAAAATC 2460
AATTAGATCT AAACAGTTAT TTCTGTTTCC TATTTAATAT AGCTGAAGTC AAAATATGTA 2520
AGAACACATT TTAAATACTC TACTTACAGT TGGCCCTCTG TGGTTAGTTC CACATCTGTG 2580
GATTCAACCA ACCAAGGACG GAAAATGCTT AAAAAATAAT ACAACAACAA CAAAAAATAC 2640
ATTATAACAA CTATTTACTT TTTTTTTTTT CTTTTTGAGA TGGAGTCTCG CTCTGTTGCC 2700
CAGGTTGGAG TGCAGTGGCA CGATCTCGGC TCACTGCAAC CTCACCTCCC GGGTTCAAGA 2760
GATCCTCCTG CCTCAGCCTC CTGAGCAGCT GGGACTACAG GCGCATGCCA CCATGCCCAG 2820
CTAATTTTTG TATTTTTAGT AGAGGCGGGG TTTCACCATG TTGGCCAGGA TGGTCTCAAT 2880
CTCCTAACCT TGAGATCCAC CCTCCACAGC CTCCCAAACT GCTGGGATTA CAGGCGTGAG 2940
CCACCGCACG TAGCATTTAC ATTAGGTATT ACAAGTAATG TAAAGATGAT TTAAGTATAC 3000
AGGAGGATGT GAATAGGTTA TATGCAAGCA CTATGCCCTT TTATATAAGT GACTTGAACA 3060
TCTGTGCCCG ATTTTAGTAT GTGCAGGGGG GCGATCTGGG AATCAGTCCC CTGTGGATAC 3120
CAAGGTACAA CTGTATTTAT TAACGCTTAC TAGATGTGAG GAGAGTCTGA ATATTTTCAG 3180
TGATCTTGGC TGTTTCAAAA AAATCTATTG ACTTTTCAAT AAATCAGCTG CAATCCATTT 3240
ATTTCATTTA CAAAAGATTT ATTGTAAGCAC TCTCAATCTT GGTTTTTCAG TTGATCTTAA 3300
GCATGTCAAT TCATAAAAAC AAGTCATTTT TGTATTTTTC ATCTTTAAGA ATGCTTAAAA 3360
AAGCTAATCC CTAAAATAGT TAGATCTTTG TAAATGCATA TTAAATAATA AAGTATGACC 3420
CACATTACTT TTTATGGGTG AAAATAAGAC AAAAATAATA GTTTTAGTGA GGATGGTGCT 3480
GAGTAAACAT AAAAACTGAT TTGCTCTCAG CTGATGTGTC CTGTACACAG TGGGAAGATT 3540
TTAGTTCACA CTTAGTCTAA CTCCCCCATT TTACAGATTT CTCACTATAT ATATTTCTAG 3600
AAGGGGCTAT GCATATTCAA TGTATTGAGA ACCAAAGCAA CCACAAATGC ATAAATGCAT 3660
AATTTATGGT CTTCAACCAA GGCCACATAA TAACCCAGTT AACTTACTCT TTAACCAGGA 3720
ATATTAAGTT CTATAACTAG TACTCAAGGT TTAACCTTAA AATTAAGATT TCCTTAACCT 3780
TAACCTTAAA ATTGATATTA TATTAAACAT ACATAATACA ATGTAACTCC ACTGTTCTCC 3840
TGAATATTTT TTGCTCTAAT CTCTCTGCCG AAAGTCAAAG TGATGGGAGA ATTGGTATAC 3900
TGGTATGACT ACGTCTTAAG TCAGATTTTT ATTTATGAGT CTTTGAGACT AAATTCAATC 3960
ACCACCAGGT ATCAAATCAA CTTTTATGCA GCAAATATAT GATTCTAGTG TCTGACTTTT 4020
GTTAAATTCA GTAATGCAGT TTTTAAAAAC CTGTATCTGA CCCACTTTGT AATTTTTGCT 4080
CCAATATCCA TTCTGTAGAC TTTTTGAAAAA AAAGTTTTTA ATTTGATGCC CAATATATTC 4140
TGACCGTTAA AAAATTCTTG TTCATATGGG AGAAGGGGGA GTAATGACTT GTACAAACAG 4200
TATTTCTGGT GTATATTTTA ATGTTTTTAA AAAGAGTAAT TTCATTTAAA TATCTGTTAT 4260
TCAAATTTGA TGATGTTAAA TGTAATATAA TGTATTTTCT TTTTATTTTG CACTCTGTAA 4320
TTGCACTTTT TAAGTTTGAA GAGCCATTTT GGTAAACGGT TTTTATTAAA GATGCTATGG 4380
AACATAAAGT TGTATTGCAT GCAATTTAAA GTAACTTATT TGACTATGAA TATTATCGGA 4440
TTACTGAATT GTATCAATTT GTTTGTGTTC AATATCAGCT TTGATAATTG TGTACCTTAA 4500
GATATTGAAG GAGAAAATAG ATAAATTTACA AGATATTATT AATTTTTATT TATTTTTCTT 4560
GGGAATTGAA AAAAATTGAA ATAAATAAAA ATGCATTGAA CATCTTGCAT TCAAAATCTT 4620
CACTGAC
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Seq ID NO: 154 Protein sequence
Protein Accession #: NP_001423.1

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1          11         21         31         41         51
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MTAGRRMEML CAGRVPALLL CLGFHLLQAV LSTTVIPSCI PGESSDNCTA LVQTEDNPRV    60
AQVSITKCSS DMNGYCLHGQ CIYLVDMSQN YCRCEVGYTG VRCEHPFLTV HQPLSKEYVA   120
LTVILIILPL ITVVGSTYYF CRWYRNRKSK EPKKEYERVT SGDPELPQV
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Seq ID NO: 155 DNA sequence
Nucleic Acid Accession #: NM_013282.2
Coding sequence: 85..2466

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1          11         21         31         41         51
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GTCCCTCCCC TCAGCGCCGA CACCATGTGG ATCCAGGTTC GGACCATGGA CGGGAGGCAG   120
ACCCACACGG TGGACTCGCT GTCCAGGCTG ACCAAGGTGG AGGAGCTGAG GCGGAAGATC   180
CAGGAGCTGT TCCACGTGGA GCCAGGCCTG CAGAGGCTGT TCTACAGGGG CAAACAGATG   240
GAGGACGGCC ATACCCTCTT CGACTACGAG GTCCGCCTGA ATGACACCAT CCAGCTCCTG   300
GTCCGCCAGA GCCTCGTGCT CCCCCACACG ACCAAGGAGC GGGACTCCGA GCTCTCCGAC   360
ACCGACTCCG GCTGCTGCCT GGGCCAGAGT GAGTCAGACA AGTCCTCCAC CACACGGCGAG   420
GCGGCCGCCG AGACTGACAG CAGGCCAGCC GATGAGGACA TGTGGGATGA GACGGAATTG   480
GGGCTGTACA AGGTCAATGA GTACGTCGAT GCTCGGGACA CGAACATGGG GGCGTGGTTT   540
GAGGCGCAGG TGGTCAGGGT GACGCGGAAG GCCCCCTCCC GGGACGAGCC CTGCAGCTCC   600
ACGTCCAGGC CGGCGCTGGA GGAGGACGTC ATTTACCACG TGAAATACGA CGACTACCCG   660
GAGAACGGCG TGGTCCAGAT GAACTCCAGG GACGTCCGAG CGCGCGCCCG CACCATCATC   720
AAGTGGCAGG ACCTGGAGGT GGGCCAGGTG GTCATGCTCA ACTACAACCC CGACAACCCC   780
AAGGAGCGGG GCTTCTGGTA CGACGCGGAG ATCTCCAGGA AGCGCGAGAC CAGGACGGCG   840
CGGGAACTCT ACGCCAACGT GGTGCTGGGG GATGATTCTC TGAACGACTG TCGGATCATC   900
TTCGTGGACG AAGTCTTCAA GATTGAGCGG CCGGGTGAAG GAGCCCCCAT GGTTGACAAC   960
CCCATGAGAC GGAAGAGCGG GCCGTCCTGC AAGCACTGCA AGGACCGACGT GAACAGACTC  1020
TGCCGGGTCT GCGCCTGCCA CCTGTGCGGG GGCCGGCAGG ACCCGACAA GCAGCTCATG  1080
TGCGATGAGT GCGACATGGC CTTCCACATC TACTGCCTGG ACCCGCCCCT CAGCAGTGTT  1140
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CCCAGCGAGG ACGAGTGGTA CTGCCCTGAG TGCCGGAATG ATGCCAGCGA GGTGGTACTG  1200
GCGGGAGAGC GGCTGAGAGA GAGCAAGAAG AAGGCGAAGA TGGCCTCGGC CACATCGTCC  1260
TCACAGCGGG ACTGGGGCAA GGGCATGGCC TGTGTGGGCC GCACCAAGGA ATGTACCATC  1320
GTCCCGTCCA ACCACTACGG ACCCATCCCG GGGATCCCCG TGGGCACCAT GTGGCGGTTC  1380
CGAGTCCAGG TCAGCGAGTC GGGTGTCCAT CGGCCCCACG TGGCTGGCAT ACACGGCCGG  1440
AGCAACGACG GAGCGTACTC CCTAGTCCTG GCGGGGGGCT ATGAGGATGA CGTGGACCAT  1500
GGGAATTTTT TCACATACAC GGGTAGTGGT GGTCGAGATC TTTCCGGCAA CAAGAGGACC  1560
GCGGAACAGT CTTGTGATCA GAAACTCACC AACACCAACA GGGCGCTGGC TCTCAACTGC  1620
TTTGCTCCCA TCAATGACCA AGAAGGGGCC GAGGCCAAGG ACTGGCGGTC GGGGAAGCCG  1680
GTCAGGGTGG TGCGCAATGT CAAGGGTGGC AAGAATAGCA AGTACGCCCC CGCTGAGGGC  1740
AACCGCTACG ATGGCATCTA CAAGGTTGTG AAATACTGGC CCGAGAAGGG GAAGTCCGGG  1800
TTTCTCGTGT GGCGCTACCT TCTGCGGAGG GACGATGATG AGCCTGGCCC TTGGACGAAG  1860
GAGGGGAAGG ACCGGATCAA GAAGCTGGGG CTGACCATGC AGTATCCAGA AGGCTACCTG  1920
GAAGCCCTGG CCAACCGAGA GCGAGAGAAG GAGAACAGCA GAGGGGAGGA GGAGGAGCAG  1980
CAGGAGGGGG GCTTCGCGTC CCCCAGGACG GGCAAGGGCA AGTGGAAGCG GAAGTCGGCA  2040
GGAGGTGGCC CGAGCAGGGC CGGGTCCCCG CGCCGGACAT CCAAGAAAAC CAAGGTGGAG  2100
CCCTACAGTC TCACGGCCCA GCAGAGCAGC CTCATCAGAG AGGACAAGAG CAACGCCAAG  2160
CTGTGGAATG AGGTCCTGGC GTCACTCAAG GACCGGCCGG CGAGCGGCAG CCCGTTCCAG  2220
TTGTTCCTGA GTAAAGTGGA GGAGACGTTC CAGTGTATCT GCTGTCAGGA GCTGGTGTTC  2280
CGGCCCATCA CGACCGTGTG CCAGCACAAC GTGTGCAAGG ACTGCCTGGA CAGATCCTTT  2340
CGGGCACAGG TGTTCAGCTG CCCTGCCTGC CGCTACGACC TGGGCCGCAG CTATGCCATG  2400
CAGGTGAACC AGCCTCTGCA GACCGTCCTC AACCAGCTCT TCCCCGGCTA CGGCAATGGC  2460
CGGTGATCTC CAAGCACTTC TCGACAGGCG TTTTGCTGAA AACGTGTCGG AGGGCTCGTT  2520
CATCGGCACT GATTTTGTTC TTAGTGGGCT TAACTTAAAC AGGTAGTGTT TCCTCCGTTC  2580
CCTAAAAAGG TTTGTCTTCC TTTTTTTTTA TTTTTATTTT TCAAATCTAT ACATTTTCAG  2640
GAATTTATGT ATTCTGGCTA AAAGTTGGAC TTCTCAGTAT TGTGTTTAGT TCTTTGAAAA  2700
CATAAAAGCC TGCAATTTCT CGACAAAACA ACACAAGGATT TTTTAAAGAT GGAATCAGAA  2760
ACTACGTGGT GTGGAGGCTG TTGATGTTTC TGGTGTCAAG TTCTCAGAAG TTGCTGCCAC  2820
CAACTCTTTA AGAAGGCGAC AGGATCAGTC CTTCTCTAGG GTTCTGGCCC CCAAGGTCAG  2880
AGCAAGCATC TTCCTGACAG CATTTTGTCA TCTAAAGTCC AGTGACATGG TTCCCCGTGG  2940
TGGCCCGTGG CAGCCCGTGG CATGGCGTGG CTCAGCTGTC TGTTGAAGTT GTTGCAAGGA  3000
AAAGAGGAAA CATCTCGGGC CTAGTTCAAA CCTTTGCCTC AAAGCCATCC CCCACCAGAC  3060
TGCTTAGCGT CTGAGATCCG CGTGAAAAGT CCTCTGCCCA CGAGAGCAGG GAGTTGGGGC  3120
CACGCAGAAA TGGCCTCAAG GGGACTCTGC TCCACGTGGG GCCAGGCGTG TGACTGACGC  3180
TGTCCGACGA AGGCGGCCAC GGACGGACGC CAGCACACGA AGTCACGTGC AAGTGCCTTT  3240
GATTCGTTCC TTCTTTCTAA AGACGACAGT CTTTGTTGTT AGCACTGAAT TATTGAAAAT  3300
GTCAACCAGA TTCTAGAAAC TGCGGTCATC CAGTTCTTCC TGACACCGGA TGGGTGCTTG  3360
GGAACCGTTT GAGCCTTATA GATCATTTAC ATTCAATTTT TTTAACTCAG CAAGTGAGAA  3420
CTTACAAGAG GGTTTTTTTT TAATTTTTTT TTCTCTTAAT GAACACATTT TCTAAATGAA  3480
TTTTTTTTGT AGTTACTGTA TATGTACCAA GAAAGATATA ACGTTAGGGT TTGGTTGTTT  3540
TTGTTTTTGT ATTTTTTTTC TTTTGAAAGG GTTTGTTAAT TTTTCTAATT TTACCAAAGT  3600
TTGCAGCCTA TACCTCAATA AAACAGGGAT ATTTTAAATC ACATACCTGC AGACAAACTG  3660
GAGCAATGTT ATTTTTAAAG GGTTTTTTTTC ACCTCCTTAT TCTTAGATTA TTAATGTATT  3720
AGGGAAGAAT GAGACAATTT TGTGTAGGCT TTTTCTAAAG TCCAGTACTT TGTCCAGATT  3780
TTAGATTCTC AGAATAAATG TTTTTCACAG ATTGAAAAAA AAAAAAAA
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Seq ID NO: 156 Protein sequence
Protein Accession #: NP_037414.2

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1          11         21         31         41         51
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MWIQVRTMDG RQTHTVDSLS RLTKVEELRR KIQELFHVEP GLQRLFYRGK QMEDGHTLFD   60
YEVRLNDTIQ LLVRQSLVLP HSTKERDSEL SDTDSGCCLG QSESDKSSTH GEAAAETDSR  120
PADEDMWDET ELGLYKVNEY VDARDTNMGA WFEAQVVRVT RKAPSRDEPC SSTSRPALEE  180
DVIYHVKYDD YPENGVVQMN SRDVRARART IIKWQDLEVG QVVMLNYNPD NPKERGFWYD  240
AEISRKRETR TARELYANVV LGDDSLNDCR IIPVDEVFKI ERPGEGSPMV DNPMRRKSGP  300
SCKHCKDDVN RLCRVCACHL CGGRQDPDKQ LMCDECDMAF HIYCLDPPLS SVPSEDEWYC  360
PECRNDASEV VLAGERLRES KKKAKMASAT SSSQRDWGKG MACVGRTKEC TIVPSNHYGP  420
IPGIPVGTMW RFRVQVSESG VHRPHVAGIH GRSNDGAYSL VLAGGYEDDV DHGNFFTYTG  480
SGGRDLSGNK RTAEQSCDQK LTNTNRALAL NCFAPINDQE GAEAKDWRSG KPVRVVRNVK  540
GGKNSKYAPA EGNRYDGIYK VVKYWPEKGK SGFLVWRYLL RRDDDEPGPW TKEGKDRIKK  600
LGLTMQYPEG YLEALANRER EKENSKREEE QQEGGFASP RTGKGKWKRK SAGGGPSRAG  660
SPRRTSKKTK VEPYSLTAQQ SSLIREDKSN AKLWNEVLAS LKDRPASGSP PQLFLSKVEE  720
TFQCICCQEL VFRPITTVCQ HNVCKDCLDR SFRAQVPSCP ACRYDLGRSY AMQVNQPLQT
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Seq ID NO: 157 DNA sequence
Nucleic Acid Accession #: NM_000756.1
Coding sequence: 186..776

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1          11         21         31         41         51
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GAGAGTGGGA ACAGTAAAGA GAAAGGAAGA CAACCTCCAG AGAAAGCCCC CGGAGACGTC  120
TCTCTGCAGA GAGGCGGCAG CACCCGGCTC ACCTGCGAAG CGCCTGGGAA GCGAGTGCCC  180
CTAACATGCG GCTGCCGCTG CTTGTGTCCG CGGGAGTCCT GCTGGTGGCT CTCCTGCCCT  240
GCCCGCCATG CAGGGCGCTC CTGAGCCGCG GGCCGGTCCC GGGAGCTCGG CAGGCGCCGC  300
AGCACCCTCA GCCCTTGGAT TTCTTCCAGC CGCCGCCGCA GTCCGAGCAG CCCCAGCAGC  360
CGCAGGCTCG GCCGGTCCTG CTCCGCATGG GAGAGGAGTA CTTCCTCCGC CTGGGGAACC  420
TCAACAAGAG CCCGGCCGCT CCCCTTTCGC CCGCCTCCTC GCTCCTCGGC GGAGGCAGCG  480
GCAGCCGCCC TTCGCCGGAA CAGGCGACCG CCAACTTTTT CCGCGTGTTG CTGCAGCAGC  540
TGCTGCTGCC TCGCGCTCG CTCGACAGCC CCGCGGCTCT CGCGGAGCGC GGCGCTAGGA  600
ATGCCTCGG CGGCCACCGA GAGGCACCGG AGAGAGAAAG GCGGTCCGAG GAGCCTCCCA  660
TCTCCCTGGA TCTCACCTTC CACCTCCTCC GGGAAGTCTT GGAAATGGCC AGGGCCGAGC  720
AGTTAGCACA GCAAGCTCAC AGCAACAGGA AACTCATGGA GATTATTGGG AAATAAAACG  780
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       GTGCGTTTGG CCAAAAAGAA TCTGCATTTA GCACAAAAAA AATTTAAAAA AATACAGTAT    840
       TCTGTACCAT AGCGCTGCTC TTATGCCATT TGTTTATTTT TATATAGCTT GAAACATAGA    900
       GGGAGAGAGG GAGAGAGCCT ATACCCCTTA CTTAGCATGC ACAAAGTGTA TTCACGTGCA    960
       GCAGCAACAC AATGTTATTC GTTTTGTCTA CGTTTAGTTT CCGTTTCCAG GTGTTTATAG   1020
       TGGTGTTTTA AAGAGAATGT AGACCTGTGA GAAAACGTTT TGTTTGAAAA AGCAGACAGA   1080
       AGTCACTCAA TTGTTTTTGT TGTGGTCTGA GCCAAAGAGA ATGCCATTCT CTTGGGTGGG   1140
       TAAGACTAAA TCTGTAAGCT CTTTGAAACA ACTTTCTCTT GTAAACGTTT CAGTAATAAA   1200
       ACATCTTTCC AGTCCTTGGT CAGTTTGGTT GTGTAAGAGA ATGTTGAATA CTTATATTTT   1260
       TAATAAAAGT TGCAAAGGT                                               1278
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Seq ID NO: 158 Protein sequence
Protein Accession #: NP_000747.1

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       1          11         21         31         41         51
       |          |          |          |          |          |
       MRLPLLVSAG VLLVALLPCP PCRALLSRGP VPGARQAPQH PQPLDFFQPP PQSEQPQQPQ    60
       ARPVLLRMGE EYFLRLGNLN KSPAAPLSPA SSLLAGGSGS RPSPEQATAN PFRVLLQQLL   120
       LPRRSLDSPA ALAERGARNA LGGHQEAPER ERRSEEPPIS LDLTFHLLRE VLEMARAEQL   180
       AQQAHSNRKL MEIIGK                                                  186
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Seq ID NO: 159 DNA sequence
Nucleic Acid Accession #: NM_001200.1
Coding sequence: 325..1514

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       1          11         21         31         41         51
       |          |          |          |          |          |
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       TGCCCCAGCG GAGCCTGCTT CGCCATCTCC GAGCCCCACC GCCCCTCCAC TCCTCGGCCT   120
       TGCCCGACAC TGAGACGCTG TTCCCAGCGT GAAAAGAGAG ACTGCGCGGC CGGCACCCGG   180
       GAGAAGGAGG AGGCAAAGAA AAGGAACGGA CATTCGGTCC TTGGGCCAGG TCCTTTGACC   240
       AGAGTTTTTC CATGTGGACG CTCTTTCAAT GGACGTGTCC CCGCGTGCTT CTTAGACGGA   300
       CTGCCGGTCTC CTAAAGGTCG ACCATGGTGG CCGGGACCCG CTGTCTTCTA GCGTTGCTGC   360
       TTCCCCAGGT CCTCCTGGGC GGCGCGGCTG GCCTCGTTCC GGAGCTGGGC CGCAGGAAGT   420
       TCGCGGCGGC GTCGTCGGGC CGCCCCTCAT CCCAGCCCTC TGACGAGGTC CTGAGCGAGT   480
       TCGAGTTGCG GCTGCTCAGC ATGTTCGGCC TGAAACAGAG ACCCACCCCC AGCAGGGACG   540
       CCGTGGTGCC CCCCTACATG CTAGACCTGT ATCGCAGGCA CTCAGGTCAG CCGGGCTCAC   600
       CCGCCCCAGA CCACCGGTTG GAGAGGGCAG CCAGCCGAGC CAACACTGTG CGCAGCTTCC   660
       ACCATGAAGA ATCTTTGGAA GAACTACCAG AAACGAGTGG GAAAACAACC CGGAGATTCT   720
       TCTTTAATTT AAGTTCTATC CCCACGGAGG AGTTTATCAC CTCAGCAGAG CTTCAGGTTT   780
       TCCGAGAACA GATGCAAGAT GCTTTAGGAA ACAATAGCAG TTTCCATCAC CGAATTAATA   840
       TTTATGAAAT CATAAAACCT GCAACAGCCA ACTCGAAATT CCCCGTGACC AGACTTTTGG   900
       ACACCAGGTT GGTGAATCAG AATGCAAGCA GGTGGGAAAG TTTTGATGTC ACCCCCGCTG   960
       TGATGCGGTG GACTGCACAG GGACACGCCA ACCATGGATT CGTGGTGGAA GTGGCCCACT  1020
       TGGAGGAGAA ACAAGGTGTC TCCAAGAGAC ATGTTAGGAT AAGCAGGTCT TTGCACCAAG  1080
       ATGAACACAG CTGGTCACAG ATAAGGCCAT TGCTAGTAAC TTTTTGGCCAT GATGGAAAAG  1140
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Seq ID NO: 160 Protein sequence
Protein Accession #: NP_001191.1

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Seq ID NO: 161 DNA sequence
Nucleic Acid Accession #: NM_001999.2
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       CGACGGGGTT TCATCCCCAA CATCCGCACT GGAGCTTGCC AAGATGTTGA TGAATGCCAG   840
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1016

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Seq ID NO: 162 Protein sequence
Protein Accession #: NP_001990.1

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GYALREDQKM CKDLDECAEG LHDCESRGMM CKNLIGTFMC ICPPGMARRP DGEGCVDENE   2340
CRTKPGICEN GRCVNIIGSY RCECNEGFQS SSSGTECLDN RQGLCFAEVL QTICQMASSS   2400
RNLVTKSECC CDGGRGWGHQ CELCPLPGTA QYKKICPHGP GYTTDGRDID ECKVMPNLCT   2460
NGQCINTMGS FRCPCKVGYT TDISGTSCID LDECSQSPRP CNYICKNTEG SYQCSCPRGY   2520
VLQEDGKTCK DLDECQTKQH NCQFLCVNTL GGFTCKCPPG FTQHHTACID NNECGSQPLL   2580
CGGKGICQNT PGSFSCECQR GFSLDATGLN CEDVDECDGN HRCQHGCQNI LGGYRCGCPQ   2640
GYIQHYQWNQ CVDENECSNP NACGSASCYN TLGSYKCACP SGFSFDQFSS ACHDVNECSS   2700
SKNPCNYGCS NTEGGYLCGC PPGYRVGQG HCVSGMGFNK GQYLSLDTEV DEENALSPEA   2760
CYECKINGYP KKDSRQKRSI HEPDPTAVEQ ISLESVDMDS PVNMKFNLSH LGSKEHILEL   2820
ELKKLEESNE DDYLLGELGE ALRMRLQIQL Y                                  2880
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Seq ID NO: 163 DNA sequence
Nucleic Acid Accession #: NM_013372.1
Coding sequence: 63..617

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1          11         21         31         41         51
|          |          |          |          |          |
GCGGCCGCAC TCAGCGCCAC GCGGTCGAAAG CGCAGGCCCC GAGGACCCGC CGCACTGACA    60
GTATGAGCCG CACAGCCTAC ACGGTGGGAG CCCTGCTTCT CCTCTTGGGG ACCCTGCTGC   120
CGGCTGCTGA AGGGAAAAAG AAAGGGTCCC AAGGTGCCAT CCCCCCGCCA GACAAGGCCC   180
AGCACAATGA CTCAGAGCAG ACTCAGTCGC CCCAGCAGCC TGGCTCCAGG AACCGGGGGC   240
GGGGCCAAGG GCGGGGCACT GCCATGCCCG GGGAGGAGGT GCTGGAGTCC AGCCAAGAGG   300
CCCTGCATGT GACGGAGCGC AAATACCTGA AGCGAGACTG GTGCAAAACC CAGCCGCTTA   360
AGCAGACCAT CCACGAGGAA GGCTGCAACA GTCGCACCAT CATCAACCGC TTCTGTTACG   420
GCCAGTGCAA CTCTTTCTAC ATCCCCAGGC ACATCGGAA TCCTTTCAGT CCTGCTCCTT   480
CCTGCTCCTT CTGCAAGCCC AAGAAATTCA CTACCATGAT GGTCACACTC AACTGCCCTG   540
AACTACAGCC ACCTACCAAG AAGAAGAGAG TCACACGTGT GAAGCAGTGT CGTTGCATAT   600
CCATCGATTT GGATTAAGCC AAATCCAGGT GCACCCAGCA TGTCCTAGGA ATGCAGCCCC   660
AGGAAGTCCC AGACCTAAAA CAACCAGATT CTTACTGGC TTAAACCTAG AGGCCAGAAG   720
AACCCCCAGC TGCCTCCTGG CAGGAGCCTG CTTGTGCGTA GTTCGTGTGC ATGAGTGTGG   780
ATGGGTGCCT GTGGGTGTTT TTAGACACCA GAGAAAACAC AGTCTCTGCT AGAGAGCACT   840
CCCTATTTTG TAAACATATC TGCTTTAATG GGGATGTACC AGAAACCCAC CTCACCCCGG   900
CTCACATCTA AAGGGGCGGG GCCGTGGTCT GGTTCTGACT TTGTGTTTTT GTGCCCTCCT   960
GGGGACCAGA ATCTCCTTTC GGAATGAATG TTCATGGAAG AGGCTCCTCT GAGGGCAAGA  1020
GACCTGTTTT AGTGCTGCAT TCGACATGGA AAAGTCCTTT TAACCTGTGC TTGCATCCTC  1080
CTTTCCTCCT CCTCCTCACA ATCCATCTCT TCTTAAGTTG ATAGTGACTA TGTCAGTCTA  1140
ATCTCTTGTT TGCCAAGGTT CCTAAATTAA TTCACTTAAC CATGATGCAA ATGTTTTTCA  1200
TTTTGTGAAG ACCCTCCAGA CTCTGGGAGA GGCTGGTGTG GGCAAGGACA AGCAGGATAG  1260
TGGAGTGAGA AAGGGAGGGT GGAGGGTGAG GCCAAATCAG GTCCAGCAAA AGTCAGTAGG  1320
GACATTGCAG AAGCTTGAAA GGCCAATACC AGAACACAGG CTGATGCTTC TGAGAAAGTC  1380
TTTTCCTAGT ATTTAACAGA ACCCAAGTGA ACAGAGGAGA AATGAGATTG CCAGAAAGTG  1440
ATTAACTTTG GCCGTTGCAA TCTGCTCAAA CCTAACACCA AACTGAAAAC ATAAATACTG  1500
ACCACTCCTA TGTTCGGACC CAAGCAAGTT AGCTAAACCA AACCAACTCC TCTGCTTTGT  1560
CCCTCAGGTG GAAAAGAGAG GTAGTTTAGA ACTCTCTGCA TAGGGGTGGG AATTAATCAA  1620
AAACCKCAGA GGCTGAAATT CCTAATACCT TTCCTTTATC GTGGTTATAG TCAGCTCATT  1680
TCCATTCCAC TATTTCCCAT AATGCTTCTG AGAGCCACTA ACTTGATTGA TAAAGATCCT  1740
GCCTCTGCTG AGTGTACCTG ACAGTAAGTC TAAAGATGAR AGAGTTTAGG GACTACTCTG  1800
TTTTAGCAAG ARATATTKTG GGGGTCTTTT TGTTTTAACT ATTGTCAGGA GATTGGGCTA  1860
RAGAGAAGAC GACGAGAGTA AGGAAATAAA GGGGRATTGCC TCTGGCTAGA GAGTAAGTTA  1920
GGTGTTAATA CCTGGTAGAA ATGTAAGGGA TATGACCTGC CTTTCTTTAT GTGCTCACTG  1980
AGGATCTGAG GGGACCCTGT TAGGAGAGCA TAGCATCATG ATGTTATTAGC TGTTCATCTG  2040
CTACTGGTTG GATGGACATA ACTATTGTAA CTATTCAGTA TTTACTGGTA GGCACTGTCC  2100
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TCTGATTAAA CTTGGCCTAC TGGCAATGGC TACTTAGGAT TGATCTAAGG GCCAAAGTGC    2160
AGGGTGGGTG AACTTTATTG TACTTTGGAT TTGGTTAACC TGTTTTCTTC AAGCCTGAGG    2220
TTTTATATAC AAACTCCCTG AATACTCTTT TTGCCTTGTA TCTTCTCAGC CTCCTAGCCA    2280
AGTCCTATGT AATATGGAAA ACAAACACTG CAGACTTGAG AATTCAGTTG CGATCAAGGC    2340
TCTGGCATTC AGAGAACCCT TGCAACTAAGA GAAGCTGTTT TTATTTCGTT TTTGTTTTGA    2400
TCCAGTGCTC TCCCATCTAA CAACTAAACA GGAGCCATTT CAAGGCGGGA GATATTTTAA    2460
ACACCCAAAA TGTTGGGTCT GATTTTCAAA CTTTTAAACT CACTACTGAT GATTCTCACG    2520
CTAGGCGAAT TTGTCCAAAC ACATAGTGTG TGTGTTTTGT ATACACTGTA TGACCCCACC    2580
CCAAATCTTT GTATTGTCCA CATTCTCCAA CAATAAAGCA CAGAGTGGAT TTAATTAAGC    2640
ACACAAATGC TAAGGCAGAA TTTTTGAGGGT GGGAGAGAAG AAAAGGGAAA GAAGCTGAAA    2700
ATGTAAAACC ACACCAGGGA GGAAAAATGA CATTCAGAAC CAGCAAACAC TGAATTTCTC    2760
TTGTTGTTTT AACTCTGCCA CAAGAATGCA ATTTCGTTAA TGGAGATGAC TTAAGTTGGC    2820-
AGCAGTAATC TTCTTTTAGG AGCTTGTACC ACAGTCTTGC ACATAAGTGC AGATTTGGCT    2880
CAAGTAAAGA GAATTTCCTC AACACTAACT TCACTGGGAT AATCAGCAGC GTAACTACCC    2940
TAAAAGCATA TCACTAGCCA AAGAGGGAAA TATCTGTTCT TCTTACTGTG CCTATATTAA    3000
GACTAGTACA AATGTGGTGT GTCTTCCAAC TTTCATTGAA AATGCCATAT CTATACCATA    3060
TTTTATTCGA GTCACTGATG ATGTAATGAT ATATTTTTTC ATTATTATAG TAGAATATTT    3120
TTATGGCAAG ATATTTGTGG TCTTGATCAT ACCTATTAAA ATAATGCCAA ACACCAAATA    3180
TGAATTTTAT GATGTACACT TTGTGCTTGG CATTAAAAGA AAAAAACACA CATCCTGGAA    3240
GTCTGTAAGT TGTTTTTTGT TACTGTAGGT CTTCAAAGTT AAGAGTGTAA GTGAAAAATC    3300
TGGAGGAGAG GATAATTTCC ACTGTGTGGA ATGTGAATAG TTAAATGAAA AGTTATGGTT    3360
ATTTAATGTA ATTATTACTT CAAATCCTTT GGTCACTGTG ATTTCAAGCA TGTTTTCTTT    3420
TTCTCCTTTA TATGACTTTC TCTGAGTTGG GCAAAGAAGA AGCTGACACA CCGTATGTTG    3480
TTAGAGTCTT TTATCTGGTC AGGGGAAACA AAATCTTGAC CCAGCTGAAC ATGTCTTCCT    3540
GAGTCAGTGC CTGAATCTTT ATTTTTTAAA TTGAATGTTC CTTAAAGGTT AACATTTCTA    3600
AAGCAATATT AAGAAAGACT TTAAATGTTA TTTTGGAAGA CTTACGATGC ATGTATACAA    3660
ACGAATAGCA GATAATGATG ACTAGTTCAC ACATAAAGTC CTTTTAAGGA GAAAATCTAA    3720
AATGAAAAGT GGATAAACAG AACATTTATA AGTGATCAGT TAATGCCTAA GAGTGAAAGT    3780
AGTTCTATTG ACATTCCTCA AGATATTTAA TATCAACTGC ATTATGTATT ATGTCTGCTT    3840
AAATCATTTA AAAACGGCAA AGAATTATAT AGACTATGAG GTACCTTGCT GTGTAGGAGG    3900
ATGAAAGGGG AGTTGATAGT CTCATAAAAC TAATTTGGCT TCAAGTTTCA TGAATCTGTA    3960
ACTAGAATTT AATTTTCACC CCAATAATGT TCTATATAGC CTTTGCTAAA GAGCAACTAA    4020
TAAATTAAAC CTATTCTTTC AAAAAAAAAA
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Seq ID NO: 164 Protein sequence
Protein Accession #: NP_037504.1

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1          11         21         31         41         51
|          |          |          |          |          |
MSRTAYTVGA LLLLLGTLLP AABGKKKGSQ GAIPPPDKAQ HNDSEQTQSP QQPGSRNRGR    60
GQGRGTAMPG EEVLESSQEA LHVTERKYLK RDWCKTQPLK QTIHEEGCNS RTIINRFCYG   120
QCNSPYIPRH IRKEEGSFQS CSFCKPKKFT TMMVTLNCPE LQPPTKKKRV TRVKQCRCIS   180
IDLD
```

Seq ID NO: 165 DNA sequence
Nucleic Acid Accession #: CAT cluster

```
1          11         21         31         41         51
|          |          |          |          |          |
GAATTGCATC GGACAGAGCT TCGCCATGGC CGAGTTGCGC GTGGTTGTGG CACTAACACT    60
GCTACGTTTC CGCCTGAGCG TGGACCGAAC GCGCAAGGTG CGGCGGAAGC CGGAGCTCAT   120
ACTGCGCACG GAGAACGGGC TCTGGCTCAA G
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Seq ID NO: 166 DNA sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..1650

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1          11         21         31         41         51
|          |          |          |          |          |
ATGCCACCTC TGCCATCCAG AATGTCTCGG GGGCCCTCCT TGGTGACAGG CAGGATGCTG    60
CCCATCACAG ACCGCCTGCT GCACCTCCTG GGGCTGGAGA AGACGGCGTT CCGCATATAC   120
GCGGTGTCCA CCCTTCTCCT CTTCCTGCTC TTCTTCCTGT TCCGCCTGCT GCTGCGGTTC   180
CTGAGGCTCT GCAGGAGCTT CTACATCACC TGCCGCCGGC TGCGCTGCTT CCCCCAGCCT   240
CCCCGGCGCA ACTGGCTGCT GGGCCACCTG GGCATGTACC TTCCAAATGA GGCGGGGCCTT   300
CAAGATGAGA AGAAGGTACT GGACAACATG CACCATGTAC TCTTGGTATG GATGGGACCT   360
GTCCTGCCGC TGTTGGTTCT GGTGCACCCT GATTACATCA AACCCCTTTT GGGAGCCTCA   420
GCTGCCATCG CCCCCAAGGA TGACCTCTTC TATGGCTTCC TAAAAACTTG GCTAGGGGAT   480
GGGCTGCTGC TCAGCAAAGG TGACAAGTGG AGCCGGCACC GTCGCCTGCT GACACCCGCC   540
TTCCACTTTG ACATCCTGAA GCCTTACATG AAGATCTTCA ACCAGAGCGC TGACATTATG   600
CATGCTAAAT GGCGGCATCT GGCAGAGGGC TCAGCGGTCT CCCTTGATAT GTTTGAGCAT   660
ATCAGCCTCA TGACCCTGGA CAGTCTTCAG AAATGTGTCT TCAGCCTACAA CAGCAACTGC   720
CAAGAGAAGA TGAGTGATTA TATCTCCGCT ATCATTGAAC TGAGCGCTCT GTCTGTCCGG   780
CGCCAGTATC GCTTGCACCA CTACCTCGAC TTCATTTACT ACCGCTCGGC GGATGGGCGG   840
AGGTTCCGGC AGGCCTGTGA CATGGTGCAC CACTTCACCA CTGAAGTCAT CCAGGAACGG   900
CGGCGGGCAC TGCGTCAGCA GGGGGCCGAG GCCTGGCTTA AGGCCAAGCA GGGGAAGACC   960
TTGGACTTTA TTGATGTGCT GCTCCTGGCC AGGGATGAAG ATGGAAAGGA ACTGTCAGAC   1020
GAGGATATCC GAGCCGAAGC AGACACCTTC ATGTTTGAGG GTCACGACAC AACATCCAGT   1080
GGGATCTCTT GGATGCTGTT CAATTTGGCA AAGTATCCGG AATACCAGGA GAAATGCCGA   1140
GAAGAGATTC AGGAAGTCAT GAAAGGCCGG GAGCTGGAGG AGCTGGAGTG GGACGATCTG   1200
ACTCAGCTGC CCTTTACAAC TATGTGCATT AAGGAGAGCC TGCGCCAGTA CCCACCTGTC   1260
ACTCTTGTCT CTCGCCAATG CACGGAGGAC ATCAAGCTCC CGGATGGGCG CATCATCCCC   1320
AAAGGAATCA TCTGCTTGGT CAGCATCTAT GGAACCCACC ACAACCCCAC AGTGTGGCCT   1380
GACTCCAAGG TGTACAACCC CTACCGCTTT GACCCGGACA ACCCACAGCA GCGCTCTCCA   1440
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CTGGCCTATG TGCCCTTCTC TGCAGGACCC AGGAATTGCA TCGGACAGAG CTTCGCCATG  1500
GCCGAGTTGC GCGTGGTTGT GGCACTAACA CTGCTACGTT TCCGCCTGAG CGTGGACCGA  1560
ACGCGCAAGG TGCGGCGGAA GCCGGAGCTC ATACTGCGCA CGGAGAACGG GCTCTGGCTC  1620
AAGGTGGAGC CGCTGCCTCC GCGGGCCTGA
```

Seq ID NO: 167 <u>Protein sequence</u>
Protein Accession #:   FGENESH predicted

```
1          11         21         31         41         51
|          |          |          |          |          |
MPPLPSRMSR GPSLVTGRML PITDRLLHLL GLEKTAFRIY AVSTLLLFLL FFLFRLLLRF   60
LRLCRSFYIT CRRLRCFPQP PRRNWLLGHL GMYLPNEAGL QDEKKVLDNM HHVLLVWMGP  120
VLPLLVLVHP DYIKPLLGAS AAIAPKDDLF YGFLKPWLGD GLLLSKGDKW SRHRRLLTPA  180
FHFDILKPYM KIFNQSADIM HAKWRHLAEG SAVSLDMFEH ISLMTLDSLQ KCVFSYNSNC  240
QEKMSDYISA IIELSALSVR RQYRLHHYLD PIYYRSADGR RFRQACDMVH HFTTEVIQER  300
RRALRQQGAE AWLKAKQGKT LDFIDVLLLA RDEDGKELSD EDIRAEADTF MFEGHDTTSS  360
GISWMLFNLA KYPEYQEKCR EEIQEVMKGR ELEELEWDDL TQLPFTTMCI KESLRQYPPV  420
TLVSRQCTED IKLPDGRIIP KGIICLVSIY GTHHNPTVWP DSKVYNPYRF DPDNPQQRSP  480
LAYVPFSAGP RNCIGQSFAM AELRVVVALT LLRFRLSVDR TRKVRRKPEL ILRTENGLWL  540
KVEPLPPRA
```

Seq ID NO: 168 <u>DNA sequence</u>
Nucleic Acid Accession #: AK058088.1
Coding sequence: 252..1772

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1          11         21         31         41         51
|          |          |          |          |          |
AGGAAACCAA GGCAAGCTCC CCCTGTCAAA GCACCTTGGC CCATAAGAAG AAAAGGGGGA   60
GCCCCAGATG TGATGAGCGC TTCCAGGCTT CAGGCTCAGA AGGCGCCCCC AGCTCTCCTG  120
TAACTCAGAG GCCAGTGTGA TGGGAGTTCC TCCACTCAGC ACACTTCCCC TGTAAACACG  180
CCTGTGGTGG GCAAAAGGGC TTTGGAACGG TTGCTTGTCT TTTCTCTCCT GCGTAATTTC  240
CACTTTCATT CATGATAATG TCGAACACGC ACAAAGCTCG GCTGGAACGC CGGGTCACTG  300
GCTCAAACAA CCGGTGGCGT TTGCCCAAAC AGCCTTTCTC TGGGGACCTG CTCTCACTTT  360
CCCAGATGTG CAAGGCTCTG AGCATAGACT TTGAGGAAGC TTTGAGGAAC CCAGACAGGT  420
TATGCATTTC ACAAATCCAG AAGTTTTTCT TTGAGAATTT CAAGAACAAG GACATCCAAA  480
GTGGGGAAGC AGATGTGATT CTCGAGTGCC TGGGCTTCAA ATGGGAGCTC CATCAGCCCC  540
GGCTTTTTCA GTCTGAGACC TTGGCCAAGC TCTACCTGAA AGCCCTGGCG CAGGGCACCA  600
CACACCCCCT GAGGGAGCTG GAGGAGCTTC TGCGAGCTCA ATCACCTAAG AAGACCAAAG  660
AAAAATCCCC TGCAAAGAGG ATCATCATTT CCTTGAAGAT CAATGACCCA CTGGTCACTA  720
AAGTCGCCTT CGCCACGGCC CTGAAGAACC TCTACATGAG TGAGGTGGAG ATTAACTTGG  780
AAGACCTACT GGGAGTGCTG GCTTCCGCCC ACATCCTCCA GTTCAGTGGC CTGTTTCAAA  840
GGTGCGTGGA TGTGATGATA GCCAGACTCA AGCCAAGCAC CATCAAGAAA TTCTACGAGG  900
CCGGCTGCAA GTACAAGGAA GAGCAGCTCA CCACCGGCTG CGAGAAGTGG CTGGAAATGA  960
ACTTGGTTCC TCTAGGGGGG ACGCAGATCC ACCTCCACAA AATCCCACAG GACCTGCTCC 1020
ACAAAGTGCT GAAGTCCCCC AGGTTATTTA CCTTTAGTGA ATTCCATCTT CTGAAAACAA 1080
TGCTTTTGTG GGTCTTCTTG CAACTGAACT ACAAGATTCA GGCAATTCCG ACTTATGAAA 1140
CCGTGATGAC ATTTTTTAAG AGCTTTCCTG AGAACTGTTG CTTTCTGGAC CGGGACATAG 1200
GACGGAGCTT GAGGCCGCTC TTCCTCCTGC TGCGTCTGCA CGGCATCACC AAAGGCAAGG 1260
ATCTGGAGGT GCTGCGGCAC CTTAACTTCT TCCCCAGAGTC ATGGCTCGAC CAGGTTACAG 1320
TCAACCATTA CCACGCACTG GAGAATGGGG GCGACATGGT CCACCTGAAA GATCTTAACA 1380
CCCAGGCTGT GAGATTTGGG CTGCTCTTTA ACCAGGAGAA TACAACTTAT TCGAAAACGA 1440
TTGCTCTATA TGGATTCTTC TTTAAGATAA AGGGACTCAA ACATGATACT ACCTCTTATA 1500
GTTTTTACT GCAGAGAATA AAGCACACAG ACCTGGAATC TCCCTCTGCG GTCTACGAGC 1560
ACAACCACGT CAGCCTGCGA GCGGCACGCC TGGTGAAGTA TGAGATCAGA GCAGAGGCCC 1620
TGGTTGACGG CAAGTGGCAG GAGTTCAGGA CAAACCAGAT CAAGCAGAAG TTTGGGTTGA 1680
CCACGTCATC CTGCAAAAGC CATACCTTGA AAATCCAAAC TGTGGGCATC CCAATCTATG 1740
TAAGTTTTGC ATTCATCTTC CCAGCATCTT GACAGTTTCC AGAAGAATCT ATGGGATTTT 1800
CCCCCCACTG GTCTGCATAA AAGAAAATAA AATGACATAA AAGGGAGC
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Seq ID NO: 169 <u>Protein sequence</u>
Protein Accession #: BAB71658.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MIMSNTHKAR LERRVTGSTN RWRLPKQPFS GDLLSLSQMC KALSIDPEEA LRNPDRLCIS   60
QIQKFFPENF KNKDIQSGEA DVILECLGFK WELHQPRLFQ SETLAKLYLK ALAQGTTHPL  120
RELEELLRAQ SPKKTKEKSP AKRIIISLKI NDPLVTKVAF ATALKNLYMS EVEINLEDLL  180
GVLASAHILQ FSGLFQRCVD VMIARLKPST IKKFYEAGCK YKEEQLTTGC EKWLEMNLVP  240
LGGTQIHLHK IPQDLLHKVL KSPRLFTFSE FHLLKTMLLW VFLQLNYKIQ AIPTYETVMT  300
FFKSFPENCC FLDRDIGRSL RPLFLCLRLH GITKGKDLEV LRHLNFPPES WLDQVTVNHY  360
HALENGGDMV HLKDLNTQAV RFGLLFNQEN TTYSKTIALY GFFFKIKGLK HDTTSYSFYM  420
QRIKHTDLES PSAVYEHNHV SLRAARLVKY EIRAEALVDG KWQEFRTNQI KQKFGLTTSS  480
CKSHTLKIQT VGIPIYVSFA FIFPAS
```

Seq ID NO: 170 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_007000.1
Coding sequence: 1...777

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGGCGTCTG CGGCAGCAGC GGAGGCCGAG AAGGGATCTC CAGTTGTGGT GGGCCTGCTA   60
GTTGTGGGCA ATATCATTAT TCTGCTGTCA GGCCTGTCCC TGTTTGCTGA GACCATATGG  120
GTGACAGCCG ACCAGTACCG TGTATACCCA CTGATGGGAG TCTCAGGCAA GGATGACGTC  180
TTCGCTGGTG CCTGGATTGC CATCTTCTGC GGCTTCTCCT TCTTCATGGT AGCCAGTTTT  240
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      GGTGTGGGTG CCGCACTCTG CCGCCGCCGG TCCATGGTCC TCACGTACCT GGTGCTCATG    300
      CTCATCGTCT ACATCTTCGA GTGCGCCTCC TGCATCACGT CCTACACCCA CCGTGACTAC    360
      ATGGTGTCCA ACCCATCCCT GATCACCAAG CAGATGCTGA CCTTCTACAG CGCGGACACC    420
      GACCAGGGCC AGGAGCTGAC CCGCCTCTGG GACCGCGTCA TGATTGAGCA AGAATGCTGT    480
      GGCACATCTG GTCCCATGGA CTGGGTGAAC TTCACGTCAG CCTTCCGGGC GGCCACTCCG    540
      GAGGTGGTGT TCCCCTGGCC CCCACTGTGC TGTCGCCGGA CGGGAAACTT CATCCCCCTC    600
      AACGAGGAGG GCTGCCGCCT GGGGCACATG GACTACCTGT TCACCAAGGG CTGCTTCGAA    660
      CACATCGGCC ACGCCATCGA CAGCTACACG TGGGGTATCT CGTGGTTTGG GTTTGCCATC    720
      CTGATGTGGA CGCTCCCGGT CATGCTGATA GCCATGTATT TCTACACCAT GCTCTGA
```

Seq ID NO: 171 Protein sequence
Protein Accession #: NP_008931.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MASAAAAEAE KGSPVVVGLL VVGNIIILLS GLSLFAETIW VTADQYRVYP LMGVSGKDDV    60
      FAGAWIAIFC GFSFFMVASP GVGAALCRRR SMVLTYLVLM LIVYIFECAS CITSYTHRDY    120
      MVSNPSLITK QMLTFYSADT DQGQELTRLW DRVMIEQECC GTSGPMDWVN FTSAFRAATP    180
      EVVFPWPPLC CRRTGNFIPL NEEGCRLGHM DYLFTKGCFE HIGHAIDSYT WGISWFGFAI    240
      LMWTLPVMLI AMYFYTML
```

Seq ID NO: 172 DNA sequence
Nucleic Acid Accession #: NM_006760.1
Coding sequence: 39..593

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      GAAAGCCTGC CAGCACCTAT TCCACCTCCC AGCCCAGCAT GGCACCCCTG CTGCCCATCC    60
      GGACCTTGCC CTTGATCCTG ATTCTGCTGG CTCTGCTGTC CCCAGGGGCT GCAGACTTCA    120
      ACATCTCAAG CCTCTCTGGT CTGCTGTCCC CGGCGCTAAC GGAGAGCCTG CTGGTTGCCT    180
      TGCCCCCCTG TCACCTCACA GGAGGCAATG CCACACTGAT GGTCCGGAGA GCCAATGACA    240
      GCAAAGTGGT GACGTCCAGC TTTGTGGTGC CTCCGTGCCG TGGGCGCAGG GAACTGGTGA    300
      GTGTGGTGGA CAGTGGTGCT GGCTTCACAG TCACTCGGCT CAGTGCATAC CAGGTGACAA    360
      ACCTCGTGCC AGGAACCAAA TTCTACATTT CCTACCTAGT GAAGAAGGGG ACAGCCACTG    420
      AGTCCAGCAG AGAGATCCCA ATGTCCACAC TCCCTCGAAG GAACATGGAA TCCATTGGGC    480
      TGGGTATGGC CCGCACAGGG GGCATGGTGG TCATCACGGT GCTGCTCTCT GTCGCCATGT    540
      TCCTGCTGGT GCTGGGCTTC ATCATTGCCC TGGCACTGGG CTCCCGCAAG TAAGGAGGTC    600
      TGCCCGGAGC AGCAGCTTCT CCAGGAAGCC CAGGGCACCA TCCAGCTCCC CAGCCCACCT    660
      GCTCCCAGGC CCCAGGCCTG TGGCTCCCTT GGTGCCCTCG CCTCCTCCTC CTGCCCTCCT    720
      CTCCCCTAGA GCCCTCTCCT CCCTCTGTCC CTCTCCTTGC CCCCAGTGCC TCACCTTCCA    780
      ACACTCCATT ATTCCTCTCA CCCCACTCCT GTCAGAGTTG ACTTTCCTCC CATTTTACCA    840
      CTTTAAACAC CCCCATAACA ATTCCCCCAT CCTTCAGTGA ACTAAGTCCC TATAATAAAG    900
      GCTGAGGCTG CATCTGCCAA AAAAAAAAAA AA
```

Seq ID NO: 173 Protein sequence
Protein Accession #: NP_006751.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MAPLLPIRTL PLILILLALL SPGAADFNIS SLSGLLSPAL TESLLVALPP CHLTGGNATL    60
      MVRRANDSKV VTSSFVVPPC RGRRELVSVV DSGAGFTVTR LSAYQVTNLV PGTKFYISYL    120
      VKKGTATESS REIPMSTLPR RNMESIGLGM ARTGGMVVIT VLLSVAMPLL VLGFIIALAL    180
      GSRK
```

Seq ID NO: 174 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..2733

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      ATGAAAGTTG GAGTGCTGTG GCTCATTTCT TTCTTCACCT TCACTGACGG CCACGGTGGC    60
      TTCCTGGGGA AAAATGATGG CATCAAAACA AAAAAAGAAC TCATTGTGAA TAAGAAAAAA    120
      CATCTAGGCC CAGTCGAAGA ATATCAGCTG CTGCTTCAGG TGACCTATAG AGATTCCAAG    180
      GAGAAAAAGA ATTTGAGAAA TTTTCTGAAG CTCTTGAAGC CTCCATTATT ATGGTCACAT    240
      GGGCTAATTA GAATTATCAG AGCAAAGGCT ACCACAGACT GCAACAGCCT GAATGGAGTC    300
      CTGCAGTGTA CCTGTGAAGA CAGCTACACC TGGTTTCCTC CCTCATGCCT TGATCCCCAG    360
      AACTGCTACC TTCACACGGC TGGAGCACTC CCAAGCTGTG AATGTCATCT CAACAACCTC    420
      AGCCAGAGTG TCAATTTCTG TGAGAGAACA AAGATTTGGG GCACTTTCAA AATTAATGAA    480
      AGGTTTACAA ATGACCTTTT GAATTCATCT TCTGCTATAT ACTCCAAATA TGCAAATGGA    540
      ATTGAAATTC AACTTAAAAA AGCATATGAA AGAATTCAAG GTTTTGAGTC GGTTCAGGTC    600
      ACCCAATTTC GAAATGGAAG CATCGTTGCT GGGTATGAAG TTGTTGGCTC CAGCAGTGCA    660
      TCTGAACTGC TGTCAGCCAT TGAACATGTT GCCGAGAAGG CTAAGACAGC CCTTCACAAG    720
      CTGTTTCCAT TAGAAGACGG CTCTTTCAGA GTGTTCGGAA AAGCCCAGTG TAATGACATT    780
      GTCTTTGGAT TTGGGTCCAA GGATGATGAA TATACCCTGC CCTGCAGCAG TGGCTACAGG    840
      GGAAACATCA CAGCCAAGTG TGAGTCCTCT GGGTGGCAGG TCATCAGGGA GACTTGTGTG    900
      CTCTCTCTGC TTGAAGAACT GAACAAGAAT TTCAGTATGA TTGTAGGCAA TGCCACTGAG    960
      GCAGCTGTGT CATCCTTCGT GCAAAATCTT TCTGTCATCA TTCGGCAAAA CCCATCAACC    1020
      ACAGTGGGGA ATCTGGCTTC GGTGGTGTCG ATTCTGAGCA ATATTTCATC TCTGTCACTG    1080
      GCCAGCCATT TCAGGGTGTC CAATTCAACA ATGGAGGATG TCATCAGTAT AGCTGACAAT    1140
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1023

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AAAGAAGAAT CTAGAATTGA CCTTGAAGTA TATCAGCATG TGTAAAGATC AGGAATTGAT 11460
CATTTTTATT TTCCAGAAAG TAGCTTTTCT TAGGGTTCCA TATTTACTCC CATAGATTCT 11520
TCCC
```

Seq ID NO: 177 <u>Protein sequence</u>
Protein Accession #: BAB21525.1

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1          11         21         31         41         51
|          |          |          |          |          |
MNSLSEANTK FMFDLFQQFR KSKENNIFYS PISITSALGM VLLGAKDNTA QQISKVLHFD   60
QVTENTTEKA ATYHVDRSGN VHHQFQKLLT EFNKSTDAYE LKIANKLFGE KTYQFLQEYL  120
```

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DAIKKFYQTS VESTDFANAP EESRKKINSW VESQTNEKIK NLFPDGTIGN DTTLVLVNAI   180
YFKGQWENKP KKENTKEEKF WPNKNTYKSV QMMRQYNSFN FALLEDVQAK VLEIPYKGKD   240
LSMIVLLPNE IDGLQKLEEK LTAEKLMEWT SLQNMRETCV DLHLPRFKME ESYDLKDTLR   300
TMGMVNIFNG DADLSGMTWS HGLSVSKVLH KAFVEVTEEG VEAAAATAVV VVELSSPSTN   360
EEFCCNHPFL FPIRQNKTNS ILFYGRFSSP
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Seq ID NO: 178 DNA sequence
Nucleic Acid Accession #: NM_001910.1
Coding sequence: 50..1240

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1          11         21         31         41         51
|          |          |          |          |          |
GGAGAGAAGA AAGGAGGGGG CAAGGGAGAA GCTGCTGGTC GGACTCACAA TGAAAACGCT   60
CCTTCTTTTG CTGCTGGTGC TCCTGGAGCT GGGAGAGGCC CAAGGATCCC TTCACAGGGT   120
GCCCCTCAGG AGGCATCCGT CCCTCAAGAA GAAGCTGCGG GCACGGAGCC AGCTCTCTGA   180
GTTCTGGAAA TCCCATAATT TGGACATGAT CCAGTTCACC GAGTCCTGCT CAATGGACCA   240
GAGTGCCAAG GAACCCCTCA TCAACTACTT GGATATGGAA TACTTCGGCA CTATCTCCAT   300
TGGCTCCCCA CCACAGAACT TCACTGTCAT CTTCGACACT GGCTCCTCCA ACCTCTGGGT   360
CCCCTCGTG TACTGCACTA GCCCAGCCTG CAAGACGCAC AGCAGGTTCC AGCCTTCCCA   420
GTCCAGCACA TACAGCCAGC CAGGTCAATC TTTCTCCATT CAGTATGGAA CCGGGAGCTT   480
GTCCGGGATC ATTGGAGCCG ACCAAGTCTC TGTGGAAGGA CTAACCGTGG TTGGCCAGCA   540
GTTTGGAGAA AGTGTCACAG AGCCAGGCCA GACCTTTGTG GATGCAGAGT TTGATGGAAT   600
TCTGGGCCTG GGATACCCCT CCTTGGCTGT GGGAGGAGTG ACTCCAGTGT TTGACAACAT   660
GATGGCTCAG AACCTGGTGG ACTTGCCGAT GTTTTCTGTC TACATGAGCA GTAACCCAGA   720
AGGTGGTGCG GGGAGCGAGC TGATTTTTGG AGGCTACGAC CACTCCCATT TCTCTGGGAG   780
CCTGAATTGG GTCCCAGTCA CCAAGCAAGC TTACTGGCAG ATTGCACTGG ATAACATCCA   840
GGTGGGAGGC ACTGTTATGT TCTGCTCCGA GGGGCTGCCA GCCATTGTGG ACACAGGGAC   900
TTCCCTCATC ACTGGCCCTT CCGACAAGAT TAAGCAGCTG CAAAACGCCA TTGGGGCAGC   960
CCCCGTGGAT GGAGAATATG CTGTGGAGTG TGCCAACCTT AACGTCATGC CGGATGTCAC  1020
CTTCACCATT AACGGAGTCC CCTATACCCT CAGCCCAACT GCCTACACCC TACTGGACTT  1080
CGTTGGATGGA ATGCAGTTCT GCAGCAGTGG CTTTCAAGGA CTTGACATCC ACCCTCCAGC  1140
TGGGCCCCTC TGGATCCTGG GGGATGTCTT CATTCGACAG TTTTACTCAG TCTTTGACCG  1200
TGGGAATAAC CGTGTGGGAC TGGCCCCAGC AGTCCCCTAA GGAGGGGCCT TGTGTCTGTG  1260
CCTGCCTGTC TGACAGACCT TGAATATGTT AGGCTGGGGC ATTCTTTACA CCTACAAAAA  1320
GTTATTTTCC AGAGAATGTA GCTGTTTCCA GGGTTGCAAC TTGAATTAAG ACCAAACAGA  1380
ACATGAGAAT ACACACACAC ACACACATAT ACACACACAC ACACTTCACA CATACACACC  1440
ACTCCCACCA CCGTCATGAT GGAGGAATTA CGTTATACAT TCATATTTTG TATTGATTTT  1500
TGATTATGAA AATCAAAAAT TTTCACATTT GATTATGAAA ATCTCCAAAC ATATGCACAA  1560
GCAGAGATCA TGGTATAATA AATCCCTTTG CAACTCCACT CAGCCCTGAC AACCCATCCA  1620
CACACGGCCA GGCCTGTTTA TCTACACTGC TGCCCACTCC TCTCTCCAGC TCCACATGCT  1680
GTACCTGGAT CATTCTGAAG CAAATTCCGA GCATTACATC ATTTTGTCCA TAAATATTTC  1740
TAACATCCTT AAATATACAA TCGGAATTCA AGCATCTCCC ATTGTCCCAC AAATGTTTGG  1800
CTGTTTTTGT AGTTGGATTG TTTGTATTAG GATTCAAGCA AGGCCCATAT ATTGCATTTA  1860
TTTGAAATGT CTGTAAGTCT CTTTCCATCT ACAGAGTTTA GCACATTTGA ACGTTGCTGG  1920
TTGAAATCCC GAGGTGTCAT TTGACATGGT TCTCTGAACT TATCTTTCCT ATAAAATGGT  1980
AGTTAGATCT GGAGGTCTGA TTTTGTGGCA AAAATACTTC CTAGGTGGTG CTGGGTACTT  2040
CTTGTTGCAT CCTGTCAGGA GGCAGATAAT GCTGGTGCCT CTCTATTGGT AATGTTAAGA  2100
CTGCTGGGTG GGTTTGGAGT TCTTGGCTTT AATCATTCAT TACAAAGTTC AGCATTTT
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Seq ID NO: 179 Protein sequence
Protein Accession #: NP_001901.1

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1          11         21         31         41         51
|          |          |          |          |          |
MKTLLLLLLV LLELGEAQGS LHRVPLRRHP SLKKKLRARS QLSEFWKSHN LDMIQFTESC   60
SMDQSAKEPL INYLDMEYFG TISIGSPPQN PTVIFDTGSS NLWVPSVYCT SPACKTHSRF  120
QPSQSSTYSQ PGQSFSIQYG TGSLSGIIGA DQVSVEGLTV VGQQFGESVT EPGQTFVDAE  180
FDGILGLGYP SLAVGGVTPV FDNMMAQNLV DLPMFSVYMS SNPEGGAGSE LIFGGYDHSH  240
FSGSLNWVPV TKQAYWQIAL DNIQVGGTVM FCSEGCQAIV DTGTSLITGP SDKIKQLQNA  300
IGAAPVDGEY AVECANLNVM PDVTFTINGV PYTLSPTAYT LLDFVDGMQF CSSGFQGLDI  360
HPPAGPLWIL GDVPIRQFYS VFDRGNNRVG LAPAVP
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Seq ID NO: 180 DNA sequence
Nucleic Acid Accession #: NM_018058.1
Coding sequence: 319..1575

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1          11         21         31         41         51
|          |          |          |          |          |
TACGCGCTGC GGGACCGGCA GGGGAACGCC ATCGGGGTCA CAGCCTGCGA CATCGACGGG   60
GACGGCCGGG AGGAGATCTA CTTCCTCAAC ACCAATAATG CCTTCTCGGG GGTGGCCACG  120
TACACCGACA AGTTGTTCAA GTTCCGCAAT AACCGGTGGG AAGACATCCT GAGCGATGAG  180
GTCAACGTGG CCCGTGGTGT GGCCAGCCTC TTTGCCGGAC GCTCTGTGGC CTGTGTGGAC  240
AGAAAGGGCT CTGGACGCTA CTCTATCTAC ATTGCCAATT ACGCCTACGG TAATGTGGGC  300
CCTGATGCCC TCATTGAAAT GGACCCTGAG GCCAGTGACC TCTCCCGGGG CATTCTGGCG  360
CTCAGAGATG TGGCTGCTGA GGCTGGGGTC AGCAAATATA CAGGGGGCCG AGGCGTCAGC  420
GTGGGCCCCA TCCTCAGCAG CAGTGCCTCG GATATCTTCT GGACAATGA GAATGGGCCT  480
AACTTCCTTT TCCACAACCG GGGCGATGGC ACCTTTGTGG ACGCTGCGGC CAGTGCTGGT  540
GTGGACGACC CCCACCAGCA TGGGCGAGGT GTCGCCCTGG CTGACTTCAA CCGTGATGGC  600
AAAGTGGACA TCGTCTATGG CAACTGGAAT GGCCCCCACC GCCTCTATCT GCAAATGAGC  660
ACCCATGGGA AGGTCCGCTT CCGGGACATC GCCTCACCCA AGTTCTCCAT GCCCTCCCCT  720
GTCCGCACGG TCATCACCGC CGACTTTGAC AATGACCAGG AGCTGGAGAT CTTCTTCAAC  780
AACATTGCCT ACCGCAGCTC CTCAGCCAAC CGCCTCTTCC GCGTCATCCG TAGAGAGCAC  840
GGAGACCCCC TCATCGAGGA GCTCAATCCC GGCGACGCCT TGGAGCCTGA GGGCCGGGGC  900
ACAGGGGGTG TGGTGACCGA CTTCGACGGA GACGGGATGC TGGACCTCAT CTTGTCCCAT  960
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        GGAGAGTCCA TGGCTCAGCC GCTGTCCGTC TTCCGGGGCA ATCAGGGCTT CAACAACAAC 1020
        TGGCTGCGAG TGGTGCCACG CACCCGGGTT GGGGCCTTTG CCAGGGGAGC TAAGGTCGTG 1080
        CTCTACACCA AGAAGAGTGG GGCCCACCTG AGGATCATCG ACGGGGGCTC AGGCTACCTG 1140
        TGTGAGATGG AGCCCGTGGC ACACTTTGGC CTGGGGAAGG ATGAAGCCAG CAGTGTGGAG 1200
        GTGACGTGGC CAGATGGCAA GATGGTGAGC CGGAACGTGG CCAGCGGGGA GATGAACTCA 1260
        GTGCTGGAGA TCCTCTACCC CCGGGATGAG GACACACTTC AGGACCCAGC CCCACTGGAG 1320
        ACACCAATGA ATGCATCCAG TTCCCATTCG TGTGCCCTCG AGACAAGCCC GTATGTGTCA 1380
        ACACCTATGG AAGCTACAGG TGCCGGACCA ACAAGAAGTG CAGTCGGGGC TACGAGCCCA 1440
        ACGAGGATGG CACAGCCTGC GTGGGGACTC TCGGCCAGTC ACCGGGCCCC CGCCCCACCA 1500
        CCCCCACCGC TGCTGCTGCC ACTGCCGCTG CTGCTGCCGC TGCTGGAGCT GCCACTGCTG 1560
        CACCGGTCCT CGTAGATGGA GATCTCAATC TGGGGTCGGT GGTTAAGGAG AGCTGCGAGC 1620
        CCAGCTGCTG AGCAGGGGTG GGACATGAAC CAGCGGATGG AGTCCAGCAG GGGAGTGGGA 1680
        AAGTGGGCTT GTGCTGCTGC CTAGACAGTA GGGATGTAAA GGCCTGGGAG CTAGACCCTC 1740
        CCCAAGCCCA TCCATGCACA TTACTTAGCT AACAATTAGG GAGACTCGTA AGGCCAGGCC 1800
        CTGTGCTGGG CACATAGCTG TGATCACAGC AGACAGGGTC GCTGCCCTGA TGGCGCTTAC 1860
        ATTCCAGTGG GTCTAATGAC CATATCTTAG GACACAGATG TGCCCAGGGA GGTGGTGTCA 1920
        CTGCACAGGA AGTATGAGGA CTTTAGTGTC CTGAGTTCAA ATCCTGATTC AGGAACTCAC 1980
        AAAGCTATGT GACCTTACAC CAGTCACTTA ACTTGTTAGC CATCCATTAT CGCATCTGCA 2040
        AAATGGGGAT TAAGAATAGA ATCTTGGGGT TAGTGTGGAG ATTAGATTAA ATGTATGTAA 2100
        GACACTTGGC ACAAAACCTG GCACATAGTA AAGGCTCAAT AAAAAACAAGT GCCTCTCACT 2160
        GGGCTTTGTC AACACGTG
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Seq ID NO: 181 Protein sequence
Protein Accession #: NP_060528.1

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1          11         21         31         41         51
|          |          |          |          |          |
MDPEASDLSR GILALRDVAA EAGVSKYTGG RGVSVGPILS SSASDIFCDN ENGPNFLFHN   60
RGDGTFVDAA ASAGVDDPHQ HGRGVALADF NRDGKVDIVY GNWNGPHRLY LQMSTHGKVR  120
FRDIASPKFS MPSPVRTVIT ADFDNDQELE IPFNNIAYRS SSANRLFRVI RREHGDPLIE  180
ELNPGDALEP EGRGTGGVVT DFDGDGMLDL ILSHGESMAQ PLSVFRGNQG FNNNWLRVVP  240
RTRVGAFARG AKVVLYTKKS GAHLRIIDGG SGYLCEMEPV AHFGLGKDEA SSVEVTWPDG  300
KMVSRNVASG EMNSVLEILY PRDEDTLQDP APLETPMNAS SSHSCALETS PYVSTPMEAT  360
GAGPTRSAVG ATSPTRMAQP AWGLSASHRA PAPPPPPLLL PLPLLLPLLE LPLLHRSS
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Seq ID NO: 182 DNA sequence
Nucleic Acid Accession #: AJ279016
Coding sequence: 1..1962

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1          11         21         31         41         51
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ATGTCCAGGA TGTTACCGTT CCTGCTGCTG CTCTGGTTTC TGCCCATCAC TGAGGGGTCC   60
CAGCGGGCTG AACCCATGTT CACTGCAGTC ACCAACTCAG TTCTGCCTCC TGACTATGAC  120
AGTAATCCCA CCCAGCTCAA CTATGGTGTG GCAGTTACTG ATGTGGACCA TGATGGGGAC  180
TTTGAGATCG TCGTGGCGGG GTACAATGGA CCCAACCTGG TTCTGAAGTA TGACCGGGCC  240
CAGAAGCGGC TGGTGAACAT CGCGGTCGAT GAGCGCAGCT CACCCTACTA CGCGCTGCGG  300
GACCGGCAGG GGAACGCCAT CGGGGTCACA GCCTGCGACA TCGACGGGGA CGGCCGGGAG  360
GAGATCTACT TCCTCAACAC CAATAATGCC TTTCTGGGGG TGGCCACGTA CACCGACAAG  420
TTGTTCAAGT TCCGCAATAA CCGGTGGGAA GACATCCTGA GCGATGAGGT CAACGTGGCC  480
CGTGGTGTGG CCAGCCTCTT TGCCGGACGC TCTGTGGCCT GTGTGGACAG AAAGGGCTCT  540
GGACGCTACT CTATCTACAT TGCCAATTAC GCCTACGGTA ATGTGGGCCC TGATGCCCTC  600
ATTGAAATGG ACCCTGAGGC CAGTGACCTC TCCCGGGGCA TTCTGGCGCT CAGAGATGTG  660
GCTGCTGAGG CTGGGGTCAG CAAATATACA GGGGGCCGAG GCGTCAGCGT GGGCCCCATC  720
CTCAGCAGCA GTGCCTCGGA TATCTTCTGC GACAATGAGA ATGGGCCTAA CTTCCTTTTC  780
CACAACCGGG GCGATGGCAC CTTTGTGGAC GCTGCGGCCA GTGCTGGTGT GGACGACCCC  840
CACCAGCATG GGCGAGGTGT CGCCCTGGCT GACTTCAACC GTGATGGCAA AGTGGACATC  900
GTCTATGGCA ACTGGAATGG CCCCCACCGC CTCTATCTGC AAATGAGCAC CCATGGGAAG  960
GTCCGCTTCC GGGACATCGC CTCACCCAAG TTCTCCATGC CCTCCCCTGT CCGCACGGTC 1020
ATCACCGCCG ACTTTGACAA TGACCAGGAG CTGGAGATCT TCTTCAACAA CATTGCCTAC 1080
CGCAGCTCCT CAGCCAACCG CCTCTTCCGC GTCATCCGTA GAGAGCACGG AGACCCCCTC 1140
ATCGAGGAGC TCAATCCCGG CGACGCCTTG GAGCCTGAGG GCCGGGGCAC AGGGGGTGTG 1200
GTGACCGACT TCGACGGAGA CGGGATGCTG GACCTCATCT TGTCCCATGG AGAGTCCATG 1260
GCTCAGCCGC TGTCCGTCTT CCGGGGCAAT CAGGGCTTCA ACAACAACTG GCTGCGAGTG 1320
GTGCCACGCA CCCGGGTTTG GGGCCTTTGCC AGGGGAGCTA AGGTCGTGCT CTACACCAAG 1380
AAGAGTGGGG CCCACCTGAG GATCATCGAC GGGGGCTCAG GCTACCTGTG TGAGATGGAG 1440
CCCGTGGCAC ACTTTGGCCT GGGGAAGGAT GAAGCCAGCA GTGTGGAGGT GACGTGGCCA 1500
GATGGCAAGA TGGTGAGCCG GAACGTGGCC AGCGGGGAGA TGAACTCAGT GCTGGAGATC 1560
CTCTACCCCC GGGATGAGGA CACACTTCAG GACCCAGCCC CACTGGAGTG TGGCCAAGGA 1620
TTCTCCCAGC AGGAAAATGG CCATTGCATG GACACCAATG AATGCATCCA GTTCCCATTC 1680
GTGTGCCCTC GAGACAAGCC CGTATGTGTC AACACCTATG GAAGCTACAG GTGCCGGACC 1740
AACAAGAAGT GCAGTCGGGG CTACGAGCCC AACGAGGATG GCACAGCCTG CGTGGGGACT 1800
CTCGGCCAGT CACCGGGCCC CCGCCCCACC ACCCCCACCG CTGCTGCTGC CACTGCCGCT 1860
GCTGCTGCCG CTGCTGGAGC TGCCACTGCT GCACCGGTCC TCGTAGATGG AGATCTCAAT 1920
CTGGGGTCGG TGGTTAAGGA GAGCTGCGAG CCCAGCTGCT GAGCAGGGGT GGGACATGAA 1980
CCAGCGGATG GAGTCCAGCA GGGGAGTGGG AAAGTGGGCT TGTGCTGCTG CCTAGACAGT 2040
AGGGATGTAA AGGCCTGGGA GCTAGACCCT CCCCAAGCCC ATCCATGCAC ATTACTTAGC 2100
TAACAATTAG GGAGACTCGT AAGGCCAGGC CCTGTGCTGG GCACATAGCT GTGATCACAG 2160
CAGACAGGGT CGCTGCCCTG ATGGCGCTTA CATTCCAGTG GGTCTAATGA CCATATCTTA 2220
GGACACAGAT GTGCCCAGGG AGGTGGTGTC ACTGCACAGG AAGTATGAGG ACTTTAGTGT 2280
CCTGAGTTCA AATCCTGATT CAGGAACTCA CAAAGCTATG TGACCTTACA CCAGTCACTT 2340
AACTTGTTAG CCATCCATTA TCGCATCTGC AAAATGGGGA TTAAGAATAG AATCTTGGGG 2400
TTAGTGTGGA GATTAGATTA AATGTATGTA AGACACTTGG CACAAAACCT GGCACATAGT 2460
AAAGGCTCAA TAAAAACAAG TGCCTCTCAC TGGGCTTTGT CAACACG
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Seq ID NO: 183 Protein sequence
Protein Accession #: CAC08451

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        1         11         21         31         41         51
        |          |          |          |          |          |
     MSRMLPFLLL LWFLPITEGS QRAEPMFTAV TNSVLPPDYD SNPTQLNYGV AVTDVDHDGD    60
     FEIVVAGYNG PNLVLKYDRA QKRLVNIAVD ERSSPYYALR DRQGNAIGVT ACDIDGDGRE   120
     EIYFLNTNNA FSGVATYTDK LFKFRNNRWE DILSDEVNVA RGVASLFAGR SVACVDRKGS   180
     GRYSIYIANY AYGNVGPDAL IEMDPEASDL SRGILALRDV AAEAGVSKYT GGRGVSVGPI   240
     LSSSASDIFC DNENGPNFLP HNRGDGTFVD AAASAGVDDP HQHGRGVALA DFNRDGKVDI   300
     VYGNWNGPHR LYLQMSTHGK VRFRDIASPK FSMPSPVRTV ITADFDNDQE LEIFFNNIAY   360
     RSSSANRLFR VIRREHGDPL IEELNPGDAL EPEGRGTGGV VTDPDGDGML DLILSHGESM   420
     AQPLSVPRGN QGFNNNWLRV VPRTRFGAFA RGAKVVLYTK KSGAHLRIID GGSGYLCEME   480
     PVAHFGLGKD EASSVEVTWP DGKMVSRNVA SGEMNSVLEI LYPRDEDTLQ DPAPLECGQG   540
     PSQQENGHCM DTNECIQFPF VCPRDKPVCV NTYGSYRCRT NKKCSRGYEP NEDGTACVGT   600
     LGQSPGPRPT TPTAAAATAA AAAAAGAATA APVLVDGDLN LGSVVKESCE PSC
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Seq ID NO: 184 DNA sequence
Nucleic Acid Accession #: FGENESHH
Coding sequence: 1..4794

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        1         11         21         31         41         51
        |          |          |          |          |          |
     ATGGCGTGTC CGGGAGGACT CCCAGCCCGT TGCTCTGGTT GGATGGGACT GGGTGGGCCC    60
     AGCGGCTCCT CCCCAGCATC CCCTCCCCAT TCCTCCTCCA GGTACAATGG ACCCAACCTG   120
     GTTCTGAAGT ATGACCGGGC CCAGAAGCGG CTGGTGAACA TCGCGGTCGA TGAGCGCAGC   180
     TCACCCTACT ACGCGCTGCG GGACCGGCAG GGGAACGCCA TCGGGGTCAC AGCCTGCGAC   240
     ATCGACGGGG ACGGCCGGGA GGAGATCTAC TTCCTCAACA CCAATAATGC CTTCTCGGGC   300
     CACAGCAGCT CAGCGCAGGT CCCTTCTGGG CTCCACAGAA ACAGGCCTGT GCTGAAGCCT   360
     CCACCTACAA CCCCTGCAGG CCTCCTGGGT CTGCCTCCAC TCAGCGGAAG GGACTTTTCC   420
     TCCTCCCTGG GTCAGGCTTC TCCGGACAGC AGGCAGGGAG AGAGGGTGCC GGTTCCCTGC   480
     TGTCGGGGTG GACTGAGACC TACCCATGAA CCAGAACCAT TTCTTCTGAG ACCCAAATCA   540
     GGGGTGGCCA CGTACACCGA CAAGTTGTTC AAGTTCCGCA ATAACCGGTG GGAAGACATC   600
     CTGAGCGATG AGGTCAACGT GGCCCGTGGT GTGGCCAGCC TCTTTGCCGG ACGCTCTGTG   660
     GCCTGTGTGG ACAGAAAGGG CTCTGGACGC TACTCTATCT ACATTGCCAA TTACGCCTAC   720
     GGTAATGTGG GCCCTGATGC CCTCATTGAA ATGGACCCTG AGGCCAGTGA CCTCTCCCGG   780
     GGCATTCTGG CGCTCAGAGA TGTGGCTGCT GAGGCTGGGG TCAGCAAATA TACAGAAGGC   840
     TTCTCCCACA CTGCCTCTCC AAGCATTGGT GAGATATCTG GCAGAACCGA GGAGCGGGAA   900
     GGAGGAGACC CAGAGGAGGC AGATGAGGAG CACAGTGGGG ATGGAAGCAC CAGCCAACTG   960
     TGCCGGCTGG GCTGGAAGGA CGGGCAGTTC AAGGAAGAAG CAGCAGCTTT GGTGGAGGAA  1020
     CAGAGGGAGG CTGGGGCAGC TGGCGTGCCC AGAGGACGTG TTCGAACAGC TCTGCAGACT  1080
     TCCAAAAGCC ATTTGGCTGA CAAGAACCTA TTTGGCCCAC CATGTTACTA TTCTGTCTGC  1140
     GCGCCTTCTC CAGCCCACCC TTTCCCTGCC CGCCAAGCCC CCAACACTA CCCTGTAGCC  1200
     CCCCTTGTCA CTCAGCTAAT GACACATGGA CGTCTGGCTG GAAAACTAGC CCGGAGTGTC  1260
     CCCCACCCCC GAGCCCCAGG AATGGACCCC AAATGTAAGG GCCGCCATGC TGAGCCCGGC  1320
     CTGATGGCTG AGGCTTTGGG CGCGTGGCCA GCGCTCAGCA CCACTGTGGT GCCAGGGGGC  1380
     CTGAGAAGCT GGGAGGAAAG CAGGCAGAAG GGGCAGGCCA TGTCCAGATG TGCACTCAGG  1440
     GAGCTGGGAG GTCCCTGGAG CCAAGCCACA CAGCACCTGC CTGCTAGAGA GCTGTATGAC  1500
     CTGGGAGAAC CTCCCATTTT ACAAAGAACA GACGGAGATC CAGGGAGGAG AAGGGACTCG  1560
     CCCAAGGTCA CACAGGAGTG CCATCTAGTG GCCACCATGC CAGCTCTCGG GGGACTCGAG  1620
     GGCCCCGGGA GGGTGGCCAA GCGAGAGATT GGGAGAGAGA CTGGGGCAGT AGGAAGACCA  1680
     CTCTCCCATC CCCTGGTCCC CAACTTCCCC AGCTGCTTGA GGCCTCTTGA AGCCGGGACA  1740
     GTGCCGGGAG CTGCCCTGCC TGGGAATCCT GGGAACTGGG TTCTGGACAT GGCCAAGGCC  1800
     CTGGCGTGGA ACCAGATGGA AAAAGAGGAG GGGAAGATTC ATGGAGACCA TGAGCCCAGA  1860
     TTTAGGCTCA GGAAAGCACG GGAAGCAGAA TTCCCCCCAG GCTCCTCTGA GGAGCCTCTG  1920
     CTGCAGTTCC CCTCAGGCCT CAGAGGCAGC CCTGTCCTCC AGGTGGGCCT GGGGCTTGCT  1980
     TCTGCCACTC ACTGTGGGTC GATGTCTTTT CTAGGGGGCC GAGGCGTCAG CGTGGGCCCC  2040
     ATCCTCAGCA GCAGTGCCTC GGATATCTTC TGCGACAATG AGAATGGGCC TAACTTCCTT  2100
     TTCCACAACC GGGGCGATGG CACCTTTGTG GACGCTGCGG CCAGTGCTGA ACGTCGTTTA  2160
     GCCTTCATCG TTCACCTCAA ATATCACCTC TGCAGAGATT TTCCTCACTC CCTGTGCCAC  2220
     CTAGCAGAAA CTGGTCCTTC CTCCTCCTGC TGCCCGTGGC ATGCACGTCT TCTTCAGGCT  2280
     CCACATTGCC ATCATGGTTT GTCTATGAGC TTTACAAGGA CCGGGTCACG GTTCTATTCA  2340
     TTCTTGACGC AAGGCTTGGC CTCCAGTGCC CACCGGAGGA CACTCAGCCT CCAGGGTTCT  2400
     CAGGGGGCCC CACCCTGCCT TCTGGCAAGA GCTCCCTGTG TCCTGGGGTC TCTGATCCCC  2460
     ACTGCCTATT ACATTGTCCT GTGGTCTGCC ATCCCAGAGA GCCTGATGAC CCACAGCTAT  2520
     TTGTCCTCTG AAAGAGTCAA CGTGGGTGTG GACGACCCCC ACCAGCATGG GCGAGGTGTC  2580
     GCCCTGGCTG ACTTCAACCG TGATGGCAAA GTGGACATCG TCTATGGCAA CTGGAATGGC  2640
     CCCCACCGCC TCTATCTGCA AATGAGCACC CATGGGAAGG TCCGCTTCCG GGACATCGCC  2700
     TCACCCAAGT TCTCCATGCC CTCCCCTGTC CGCACGGTCA TCACCGCCGA CTTTGACAAT  2760
     GACCAGGAGC TGGAGATCTT CTTCAACAAC ATTGCCTACC GCAGCTCCTC AGCCAACCGC  2820
     CTCTTCCGAT GCTCCATCCT GGCTCGTGGC TCTTCATCCT TGACAGCTGG TGGGAGGAAC  2880
     GGTCAGGAG AAGGTTTAAG AATCAGAAGG GGAGGGTTCC CAGGGCCAGG GGGTCAGGCC  2940
     AAGGTCAACA CAGGTCCCCT GATGAAGAAA CAGAAAGGAA GGAAGGACGA GGACTGGGCA  3000
     AGAGGCTGTG GGAATGCAGG GCAAAGCCTG GCCAAGGAGC CGGCCTCTGC TATTGCAGGG  3060
     AAAGGGAAGG GAAATGTGGC CCAAGTGTGT CCCAGAACCC AAGCGCCACA AGATACAAAG  3120
     CCACACTACC ACAAAAAGGG GCTACAGGGT CCAATCACTA CCAGGAAAAG GGGCTACGGG  3180
     GTCCAATCAC TACCAGGAAA AGGGGCTACG GGGTCCAATC ACTACCAGGA AAAGGGGCTA  3240
     CGGGGTCCAA TCACTACCAG GAAAAGGGGC TACGGGGTCC AATCACTACC AGGAAAAGGG  3300
     GCTACGGGCT CCAATCACTA CCAGGAAAAG GGGTACAGGG TCCAATCACT ACCAGGAAAG  3360
     AGGGGCTACG GGCTCCAATC ACTACCAGGA AAAGGGGCTA CAGGGTCCAA TCACTACCAG  3420
     AGAAAGGGGC TACGGGCTCC AATCACTACC AGGAAAAGGG GCTACGGGGT CCAATCACTA  3480
     CCAGGAAAAG GGGCTACAGG GTCCAATCAC TACCAGGAAA AGGGGCTACG GGGTCCAATC  3540
     ACTACCAGGA AAAGGGGCTA CGGGCTCCAA TCACTACCAG GAAAAGGGGC TACGGGGTCC  3600
     AATCACTACC AGGAAAAGGG GCTACAGGGT CCAATCACTA CCAGGAAAAG GGGCTACAGG  3660
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     GTCCAATCAC TACCACAGAA AGGGGCTACG GGCTCCAATC ACTACCAGGA AAAGGGGCTA   3720
     CGGGGTCCAA TCACTACCAG GAAAAGGGGC TACGGGCTCC AATCACTACC AGGAAAAGAG   3780
     GCTATGGGGT CCAATCACTA CCAGGAAAAG GGGCTACGGG CTCCAATCAC TACCAGGAAA   3840
     AGGGGCTATG GGGTCCAATC ACTACCACAG AAAGGGGCTA CGGGGTCCAA CGTCATCCGT   3900
5    AGAGAGCACG GAGACCCCCT CATCGAGGAG CTCAATCCCG GCGACGCCTT GGAGCCTGAG   3960
     GGCCGGGGCA CAGGGGGTGT GGTGACCGAC TTCGACGGAG ACGGGATGCT GGACCTCATG   4020
     TTGTCCCATG GAGAGTCCAT GGCTCAGCCG CTGTCCGTCT TCCGGGGCAA TCAGGGCTTC   4080
     AACAACAACT GGCTGCGAGT GGTGCCACGC ACCCGGTTTG GGGCCTTTGC CAGGGGAGCT   4140
     AAGGTCGTGC TCTACACCAA GAAGAGTGGG GCCCACCTGA GGATCATCGA CGGGGGCTCA   4200
10   GGCTACCTGT GTGAGATGGA GCCCGTGGCA CACTTTGGCC TCCAATCAC TGAAGCCAGC    4260
     AGTGTGGAGG TGACGTGGCC AGATGGCAAG ATGGTGAGCC GGAACGTGGC CAGCGGGGAG   4320
     ATGAACTCAG TGCTGGAGAT CCTCTACCCC CGGGATGAGG ACACACTTCA GGACCCAGCC   4380
     CCACTGGAGT GTGGCCAAGG ATTCTCCCAG CAGGAAAATG GCCATTGCAT GGACACCAAT   4440
     GAATGCATCC AGTTCCCATT CGTGTGCCCT CGAGACAAGC CCGTATGTGT CAACACCTAT   4500
15   GGAAGCTACA GGTGCCGGAC CAACAAGAAG TGCAGTCGGG GCTACGAGCC AACGAGGAT    4560
     GGCACAGCCT GCGTGGGTAC TGAGCTAGGC TCTAGGCCATA CAATGACGTG GAAACCAAGG   4620
     CCCAAAAAGG AGCTGCAACT TTCCCAAGGC ATCTGCACCC CCGTCTGGTC CTTTTTCCTG   4680
     CCGGGTTGCC GGCTGCTCCT CAAAAGAGCT CAGCTCCAGG CTGCTCCCAG CACCCTTCTC   4740
     CAGAAAGCTC CAGGTATTCC AGAAGCCCAA GTGTATGAAC AAGATCAGGA ATAA
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Seq ID NO: 185 Protein sequence
Protein Accession #: FGENESHH

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     1          11         21         31         41         51
     |          |          |          |          |          |
     MACPGGLPAR CSGWMGLGGP SGSSPASPPH SSSRYNGPNL VLKYDRAQKR LVNIAVDERS   60
     SPYYALRDRQ GNAIGVTACD IDGDGREEIY FLNTNNAFSG HSSSAQVPSG LHRNRPVLKP   120
     PPTTPAGLLG LPPLSGRDFS SSLGQASPDS RQGERVPVPC CRGGLRPTHE PEPFLLRPKS   180
     GVATYTDKLP KFRNNRWEDI LSDEVNVARG VASLPAGRSV ACVDRKGSGR YSIYIANYAY   240
     GNVGPDALIE MDPEASDLSR GILALRDVAA EAGVSKYTEG FSHTASPSIG EISGRTEBRE   300
     GGDPEEADEE HSGDGSTSQL CRLGWKDGQF KEEAAALVEE QREAGAAGVP RGRVRTALQT   360
     SKSHLADKNL FGPPCYYSVC APSPAHPFPA RQAPQHYPVA PLVTQLMTHG RLAGKLARSV   420
     PHPRAPGMDP KCKGRHAEPG LMAEALGAWP ALSTTVVPGG LRSWEESRQK GQAMSRCALR   480
     ELGGPWSQAT QHLPARELYD LGEPPILQRT DGDPGRRRDS PKVTQECHLV ATMPALGGLE   540
     GPGRVAKREI GRETGAVGRP LSHPLVPNFP SCLRPLEAGT VPGAALPGNP GNWVLDMAKA   600
     LAWNQMEKEE GKIHGDHEPR PRLRKAREAE PPPGSSEEPL LQFPSGLRGS PVLQVGLGLA   660
     SATHCGSMSF LGGRGVSVGP ILSSSASDIF CDNENGPNFL FHNRGDGTFV DAAASAERRL   720
     APIVHLKYHL CRDFPHSLCH LAETGPSSSC CPWHARLLQA PHCHHGLSMS PTRTGSRFYS   780
     FLTQGLASSA HRRTLSLQGS QGAPPCLLAR APCVLGSLIP TAYYIVLWSA IPESLMTHSY   840
     LSSERVNVGV DDPHQHGRGV ALADFNRDGK VDIVYGNWNG PHRLYLQMST HGKVRFRDIA   900
     SPKFSMPSPV RTVITADFDN DQELEIPFNN IAYRSSSANR LFRCSILARG SSSLTAGGRN   960
     GQGEGLRIRR GGFPGPGGQA KVNTGPLMKK QKGRKDEDWA RGCGNAGQSL AKEPASAIAG   1020
     KGKGNVAQSV PRTQAPQDTK PHYHKKGLQG PITTRKRGYG VQSLPGKGAT GSNHYQEKGL   1080
     RGPITTRKRG YGVQSLPGKG ATGSNHYQEK GLQGPITTRK RGYGLQSLPG KGATGSNHYH   1140
     RKGLRAPITT RKRGYGVQSL PGKGATGSNH YQEKGLRGPI TTRKRGYGLQ SLPGKGATGS   1200
     NHYQEKGLQG PITTRKRGYR VQSLPQKGAT GSNHYQEKGL RGPITTRKRG YGLQSLPGKE   1260
     AMGSNHYQEK GLRAPITTRK RGYGVQSLPQ KGATGSNVIR REHGDPLIEE LNPGDALEPE   1320
     GRGTGGVVTD FDGDGMLDLI LSHGESMAQP LSVFRGNQGF NNNWLRVVPR TRFGAFARGA   1380
     KVVLYTKKSG AHLRIIDGGS GYLCEMEPVA HPGLGKDEAS SVEVTWPDGK MVSRNVASGE   1440
     MNSVLEILYP RDEDTLQDPA PLECGQGFSQ QENGHCMDTN ECIQFPFVCP RDKPVCVNTY   1500
     GSYRCRTNKK CSRGYEPNED GTACVGTELG SRHTMTWKPR PKKELQLSQG ICTPVWSFFL   1560
     PGCRLLLKRA QLQAAPSTLL QKAPGIPEAQ VYEQDQE
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Seq ID NO: 186 DNA sequence
Nucleic Acid Accession #: NM_000584.1
Coding sequence: 75..374

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     1          11         21         31         41         51
     |          |          |          |          |          |
     AGCAGAGCAC ACAAGCTTCT AGGACAAGAG CCAGGAAGAA ACCACCGGAA GGAACCATCT   60
     CACTGTGTGT AAACATGACT TCCAAGCTGG CCGTGGCTCT CTTGGCAGCC TTCCTGATTT   120
     CTGCAGCTCT GTGTGAAGGT GCAGTTTTGC CAAGGAGTGC TAAAGAACTT AGATGTCAGT   180
     GCATAAAGAC ATACTCCAAA CCTTTCCACC CCAAATTTAT CAAAGAACTG AGAGTGATTG   240
     AGAGTGGACC ACACTGCGCC AACACAGAAA TTATTGTAAA GCTTTCTGAT GGAAGAGAAC   300
     TCTGTCTGGA CCCCAAGGAA AACTGGGTGC AGAGGGTTGT GGAGAAGTTT TTGAAGAGGG   360
     CTGAGAATTC ATAAAAAAAT TCATTCTCTG TGGTATCCAA GAATCAGTGA AGATGCCAGT   420
     GAAACTTCAA GCAAATCTAC TTCAACACTT CATGTATTGT GTGGGTCTGT TGTAGGGTTG   480
     CCAGATGCAA TACAAGATTC CTGGTTAAAT TTGAATTTGT GTAAACAATG AATAGTTTTT   540
     CATTGTACCA TGAAATATCC AGAACATACT TATATGTAAA GTATTATTTA TTTGAATCTA   600
     CAAAAAACAA CAAATAATTT TTAAATATAA GGATTTTCCT AGATATTGCA CGGGAGAATA   660
     TACAAATAGC AAATTGAGC CAAGGGCCAA GAGAATATCC GAACTTTAAT TTCAGGAATT    720
     GAATGGGTTT GCTAGAATGT GATATTTGAA GCATCACATA AAAATGATGG GACAATAAAT   780
     TTTGCCATAA AGTCAAATTT AGCTGGAAAT CCTGGATTTT TTTCTGTTAA ATCTGGCAAC   840
     CCTAGTCTGC TAGCCAGGAT CCACAAGTCC TTGTTCCACT GTGCCTTGGT TTCTCCTTTA   900
     TTTCTAAGTG GAAAAAGTAT TAGCCACCAT CTTACCTCAC AGTGATGTTG TGAGGACATG   960
     TGGAAGCACT TTAAGTTTTT TCATCATAAC ATAAATTATT TTCAAGTGTA ACTTATTAAC   1020
     CTATTTATTA TTTATGTATT TATTTAAGCA TCAAATATTT GTGCAAGAAT TTGGAAAAAT   1080
     AGAAGATGAA TCATTGATTG AATAGTTATA AAGATGTTAT AGTAAATTTA TTTTATTTTA   1140
     GATATTAAAT GATGTTTTAT TAGATAAATT TCAATCAGGG TTTTTAGATT AAACAAAGAA   1200
     ACAATTGGGT ACCCAGTTAA ATTTTCATTT CAGATAAAACA ACAAATAATT TTTTAGTATA   1260
     AGTACATTAT TGTTTATCTG AAAGTTTTAA TTGAACTAAC AATCCTAGTT TGATACTCCC   1320
     AGTCTTGTCA TTGCCAGCTG TGTTGGTAGT GCTGTGTTGA ATTACGGAAT AATGAGTTAG   1380
     AACTATTAAA ACAGCCAAAA CTCCACAGTC AATATTAGTA ATTTCTTGCT GGTTGAAACT   1440
     TGTTTATTAT GTACAAATAG ATTCTTATAA TATTATTTAA ATGACTGCAT TTTTAAATAC   1500
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AAGGCTTTAT ATTTTTAACT TTAAGATGTT TTTATGTGCT CTCCAAATTT TTTTTACTGT  1560
TTCTGATTGT ATGGAAATAT AAAAGTAAAT ATGAAACATT TAAAATATAA TTTGTTGTCA  1620
AAGTAAAAAA AAAAAAAAAA
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Seq ID NO: 187 <u>Protein sequence</u>
Protein Accession #: NP_000575.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MTSKLAVALL AAFLISAALC EGAVLPRSAK ELRCQCIKTY SKPFHPKFIK ELRVIESGPH  60
CANTEIIVKL SDGRELCLDP KENWVQRVVE KFLKRAENS
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Seq ID NO: 188 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_003661.1
Coding sequence: 1..1152

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1          11         21         31         41         51
|          |          |          |          |          |
ATGAGTGCAC TTTTCCTTGG TGTGGGAGTG AGGGCAGAGG AAGCTGGAGC GAGGGTGCAA  60
CAAAACGTTC CAAGTGGGAC AGATACTGGA GATCCTCAAA GTAAGCCCCT CGGTGACTGG  120
GCTGCTGGCA CCATGGACCC AGAGAGCAGT ATCTTTATTG AGGATGCCAT TAAGTATTTC  180
AAGGAAAAAG TGAGCACACA GAATCTGCTA CTCCTGCTGA CTGATAATGA GGCCTGGAAC  240
GGATTCGTGG CTGCTGCTGA ACTGCCCAGG AATGAGGCAG ATGAGCTCCG TAAAGCTCTG  300
GACAACCTTG CAAGACAAAT GATCATGAAA GACAAAAACT GGCACGATAA AGGCCAGCAG  360
TACAGAAACT GGTTTCTGAA AGAGTTTCCT CGGTTGAAAA GTGAGCTTGA GGATAACATA  420
AGAAGGCTCC GTGCCCTCTG AGATGGGGTT CAGAAGGTCC ACAAAGGCAC CACCATCGCC  480
AATGTGGTGT CTGGCTCTCT CAGCATTTCC TCTGGCATCC TGACCCTCGT CGGCATGGGT  540
CTGGCACCCT TCACAGAGGG AGGCAGCCTT GTACTCTTGG AACCTGGGAT GGAGTTGGGA  600
ATCACAGCCG CTTTGACCGG GATTACCAGC AGTACCATGG ACTACGGAAA GAAGTGGTGG  660
ACACAAGCCC AAGCCCACGA CCTGGTCATC AAAAGCCTTG ACAAATTGAA GGAGGTGAGG  720
GAGTTTTTGG GTGAGAACAT ATCCAACTTT CTTTCCTTAG CTGGCAATAC TTACCAACTC  780
ACACGAGGCA TTGGGAAGGA CATCCGTGCC CTCAGACGAG CCAGAGCCAA TCTTCAGTCA  840
GTACCGCATG CCTCAGCCTC ACGCCCCCGG GTCACTGAGC CAATCTCAGC TGAAAGCGGT  900
GAACAGGTGG AGAGGGTTAA TGAACCCAGC ATCCTGGAAA TGAGCAGAGG AGTCAAGCTC  960
ACGGATGTGG CCCCTGTAAG CTTCTTTCTT GTGCTGGATG TAGTCTACCT CGTGTACGAA  1020
TCAAAGCACT TACATGAGGG GGCAAAGTCA GAGACAGCTG AGGAGCTGAA GAAGGTGGCT  1080
CAGGAGCTGG AGGAGAAGCT AAACATTCTC AACAATAATT ATAAGATTCT GCAGGCGGAC  1140
CAAGAACTGT GA                                                       1152
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Seq ID NO: 189 <u>Protein sequence</u>
Protein Accession #: NP_003652.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MSALFLGVGV RAEEAGARVQ QNVPSGTDTG DPQSKPLGDW AAGTMDPESS IFIEDAIKYF  60
KEKVSTQNLL LLLTDNEAWN GFVAAAELPR NEADELRKAL DNLARQMIMK DKNWHDKGQQ  120
YRNWFLKEFP RLKSELEDNI RRLRALADGV QKVHKGTTIA NVVSGSLSIS SGILTLVGMG  180
LAPFTEGGSL VLLEPGMELG ITAALTGITS STMDYGKKWW TQAQAHDLVI KSLDKLKEVR  240
EFLGENISNF LSLAGNTYQL TRGIGKDIRA LRRARANLQS VPHASASRPR VTEPISAESG  300
EQVERVNEPS ILEMSRGVKL TDVAPVSFPL VLDVVYLVYE SKHLHEGAKS ETAEELKKVA  360
QELEEKLNIL NNNYKILQAD QEL
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Seq ID NO: 190 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_014452.1
Coding sequence: 1..1968

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1          11         21         31         41         51
|          |          |          |          |          |
ATGGGGACCT CTCCGAGCAG CAGCACCGCC CTCGCCTCCT GCAGCCGCAT CGCCCGCCGA  60
GCCACAGCCA CGATGATCGC GGGCTCCCTT CTCCTGCTTG GATTCCTTAG CACCACCACA  120
GCTCAGCCAG AACAGAAGGC CTCGAATCTC ATTGGCACAT ACCGCCATGT TGACCGTGCC  180
ACCGGCCAGG TGCTAACCTG TGACAAGTGT CCAGCAGGAA CCTATGTCTC TGAGCATTGT  240
ACCAACACAA GCCTGCGCGT CTGCAGCAGT TGCCCTGTGG GGACCTTTAC CAGGCATGAG  300
AATGGCATAG AGAAATGCCA TGACTGTAGT CAGCCATGCC CATGGCCAAT GATTGAGAAA  360
TTACCTTGTG CTGCCTTGAC TGACCGAGAA TGCACTTGCC CACCTGGCAT GTTCCAGTCT  420
AACGCTACCT GTGCCCCCCA TACGGTGTGT CCTGTGGGTT GGGGTGTGCG GAAGAAAGGG  480
ACAGAGACTG AGGATGTGCG GTGTAAGCAG TGTGCTCGGG GTACCTTCTC AGATGTGCCT  540
TCTAGTGTGA TGAAATGCAA AGCATACACA GACTGTCTGA GTCAGAACCT GGTGGTGATC  600
AAGCCGGGGA CCAAGGAGAC AGACAACGTC TGTGGCACAC TCCCGTCCTT CTCCAGCTCC  660
ACCTCACCTT CCCCTGGCAC AGCCATCTTT CCACGCCCTG AGCACATGGA AACCCATGAA  720
GTCCCTTCCT CCACTTATGT TCCCAAAGGC ATGAACTCAA CAGAATCCAA CTCTTCTGCC  780
TCTGTTAGAC CAAAGGTACT GAGTAGCATC CAGGAAGGGA CAGTCCCTGA CAACACAAGC  840
TCAGCAAGGG GGAAGGAAGA CGTGAACAAG ACCCTCCCAA ACCTTCCAGGT AGTCAACCAC  900
CAGCAAGGCC CCCACCACAG ACACATCCTG AAGCTGCTGC CGTCCATGGA GGCCACTGGG  960
GGCGAGAAGT CCAGCACGCC CATCAAGGGC CCCAAGAGGG GACATCCTAG ACAGAACCTA  1020
CACAAGCATT TTGACATCAA TGAGCATTTG CCCTGGATGA TTGTGCTTTT CCTGCTGCTG  1080
GTGCTTGTGG TGATTGTGGT GTGCAGTATC CGGAAAAGCT CGAGGACTCT GAAAAAGGGG  1140
CCCCGGCAGG ATCCCAGTGC CATTGTGGAA AAGGCAGGGC TGAAGAAATC CATGACTCCA  1200
ACCCAGAACC GGGAGAAATG GATCTACTAC TGCAATGGCC ATGGTATCGA TATCCTGAAG  1260
CTTGTAGCAG CCCAAGTGGG AAGCCAGTGG AAAGATATCT ATCAGTTTCT TTGCAATGCC  1320
AGTGAGAGGG AGGTTGCTGC TTTCTCCAAT GGGTACACAG CCGACCACGA GCGGGCCTAC  1380
GCAGCTCTGC AGCACTGGAC CATCCGGGGC CCCGAGGCCA GCCTCGCCCA GCTAATTAGC  1440
GCCCTGCGCC AGCACCGGAG AAACGATGTT GTGGAGAAGA TTCGTGGGCT GATGGAAGAC  1500
ACCACCCAGC TGGAAACTGA CAAACTAGCT CTCCCGATGA GCCCCAGCCG GCTTAGCCCG  1560
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AGCCCCATCC CCAGCCCCAA CGCGAAACTT GAGAATTCCG CTCTCCTGAC GGTGGAGCCT  1620
TCCCCACAGG ACAAGAACAA GGGCTTCTTC GTGGATGAGT CGGAGCCCCT TCTCCGCTGT  1680
GACTCTACAT CCAGCGGCTC CTCCGCGCTG AGCAGGAACG GTTCCTTTAT TACCAAAGAA  1740
AAGAAGGACA CAGTGTTGCG GCAGGTACGC CTGGACCCCT GTGACTTGCA GCCTATCTTT  1800
GATGACATGC TCCACTTTCT AAATCCTGAG GAGCTGCGGG TGATTGAAGA GATTCCCCAG  1860
GCTGAGGACA AACTAGACCG GCTATTCGAA ATTATTGGAG TCAAGAGCCA GGAAGCCAGC  1920
CAGACCCTCC TGGACTCTGT TTATAGCCAT CTTCCTGACC TGCTGTAG
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Seq ID NO: 191 <u>Protein sequence</u>
Protein Accession #: NP_055267.1

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1          11         21         31         41         51
|          |          |          |          |          |
MGTSPSSSTA LASCSRIARR ATATMIAGSL LLLGFLSTTT AQPEQKASNL IGTYRHVDRA   60
TGQVLTCDKC PAGTYVSEHC TNTSLRVCSS CPVGTFTRHE NGIEKCHDCS QPCPWPMIEK  120
LPCAALTDRE CTCPPGMFQS NATCAPHTVC PVGWGVRKKG TETEDVRCKQ CARGTFSDVP  180
SSVMKCKAYT DCLSQNLVVI KPGTKETDNV CGTLPSFSSS TSPSPGTAIF PRPEHMETHE  240
VPSSTYVPKG MNSTESNSSA SVRPKVLSSI QEGTVPDNTS SARGKEDVNK TLPNLQVVNH  300
QQGPHHRHIL KLLPSMEATG GEKSSTPIKG PKRGHPRQNL HKHFDINEHL PWMIVLFLLL  360
VLVVIVVCSI RKSSRTLKKG PRQDPSAIVE KAGLKKSMTP TQNREKWIYY CNGHGIDILK  420
LVAAQVGSQW KDIYQFLCNA SEREVAAFSN GYTADHERAY AALQHWTIRG PEASLAQLIS  480
ALRQHRRNDV VEKIRGLMED TTQLETDKLA LPMSPSPSLP SPIPSPNAKL ENSALLTVEP  540
SPQDKNKGFF VDESEPLLRC DSTSSGSSAL SRNGSFITKE KKDTVLRQVR LDPCDLQPIF  600
DDMLHFLNPE ELRVIEEIPQ AEDKLDRLFE IIGVKSQEAS QTLLDSVYSH LPDLL
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Seq ID NO: 192 <u>DNA sequence</u>
Nucleic Acid Accession #: XM_044533
Coding sequence: 238..2751

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1          11         21         31         41         51
|          |          |          |          |          |
GCTCTGCCCA AGCCGAGGCT GCGGGGCCGG CGCCGGCGGG AGGACTGCGG TGCCCCGCGG   60
AGGGGCTGAG TTTGCCAGGG CCCACTTGAC CCTGTTTCCC ACCTCCCGCC CCCCAGGTCC  120
GGAGGCGGGG GCCCCCGGGG CGACTCGGGG GCGGACCGCG GGGCGGAGCT GCCGCCCGTG  180
AGTCCGGCCG AGCCACCTGA GCCCGAGCCG CGGGACACCG TCGCTCCTGC TCTCCGAATG  240
CTGCGCACCG CGATGGGCCT GAGGAGCTGG CTCGCCGGCC CATGGGGCGC GCTGCCGCCT  300
CGGCCACCGC TGCTGCTGCT CCTGCTGCTG CTGCTCCTGC TGCAGCCGCC GCCTCCGACC  360
TGGGCGCTCA GCCCCCGGAT CAGCCTGCCT CTGGGCTCTG AAGAGCGGCC ATTCCTCAGA  420
TTCGAAGCTG AACACATCTC CAACTACACA GCCCTTCTGC TGAGCAGGGA TGGCAGGACC  480
CTGTACGTGG GTGCTCGAGA GGCCCTCTTT GCACTCAGTA GCAACCTCAG CTTCCTGCCA  540
GGCGGGGAGT ACCAGGAGCT GCTTTGGGGT GCAGACGCAG AGAAGAAACA GCAGTGCAGC  600
TTCAAGGGCA AGGACCCACA GCGCGACTGT CAAAACTACA CCGTGCCGCTC CCTGCCGCTC  660
AGCGGCAGTC ACCTGTTCAC CTGTGGCACA GCAGCCTTCA GCCCCATGTG TACCTACATC  720
AACATGGAGA ACTTCACCCT GGCAAGGGAC GAGAAGGGGA ATGTCCTCCT GGAAGATGGC  780
AAGGGCCGTT GTCCCTTCGA CCCGAATTTC AAGTCCACTG CCCTGGTGGT TGATGGCGAG  840
CTCTACACTG GAACAGTCAG CAGCTTCCAA GGGAATGACC CGGCCATCTC GCGGAGCCAA  900
AGCCTTCGCC CCACCAGAC CGAGAGCTCC CTCAACTGGC TGCAAGACCC AGCTTTTGTG  960
GCCTCAGCCT ACATTCCTGA GAGCCTGGGC AGCTTGCAAG GCGATGATGA CAAGATCTAC 1020
TTTTTCTTCA GCGAGACTGG CCAGGAATTT GAGTTCTTTG AGAACACCAT TGTGTCCCGC 1080
ATTGCCCGCA TCTGCAAGGG CGATGAGGGT GGAGAGCGGG TGCTACAGCA GCGCTGGACC 1140
TCCTTCCTCA AGGCCCAGCT GCTGTGCTCA CGGCCCGACG ATGGCTTCCC CTTCAACGTG 1200
CTGCAGGATG TCTTCACGCT GAGCCCCAGC CCCCAGGACT GGCGTGACAC CCTTTTCTAT 1260
GGGGTCTTCA CTTCCCAGTG GCACAGGGGA ACTACAGAAG GCTCTGCCGT CTGTGTCTTC 1320
ACAATGAAGG ATGTGCAGAG AGTCTTCAGC GGCCTCTACA AGGAGGTGAA CCGTGAGACA 1380
CAGCAGTGGT ACACCGTGAC CCACCCGGTG CCCACCACCC AGGACCTGGAGC GTGCATCACC 1440
AACAGTGCCC GGGAAAGGAA GATCAACTCA TCCCTGCAGC TCCCAGACCG CGTGCTGAAC 1500
TTCCTCAAGG ACCACTTCCT GATGGACGGG CAGGTCCGAA GCCGCATGCT GCTGCTGCAG 1560
CCCCAGGCTC GCTACCAGCG CGTGGCTGTA CACCGCGTCC CTGGCCTGCA CCACACCTAC 1620
GATGTCCTCT TCCTGGGCAC TGGTGACGGC CGGCTCCACA AGGCAGTGAG CGTGGGGCCCC 1680
CGGGTGCACA TCATTGAGGA GCTGCAGATC TTCTCATCGG GACAGCCCGT GCAGAATCTG 1740
CTCCTGGACA CCCACAGGGG GCTGCTGTAT GCGGCCTCAC ACTCGGGCGT AGTCCAGGTG 1800
CCCATGGCCA ACTGCAGCCT GTACAGGAGC TGTGGGGACT GCCTCCTCGC CCGGGACCCC 1860
TACTGTGCTT GGAGCGGCTC CAGCTGCAAG CACGTCAGCC TCTACCAGCC TCAGCTGGCC 1920
ACCAGGCCGT GGATCCAGGA CATCGAGGGA GCCAGCGCCA AGGACCTTTG CAGCGCGTCT 1980
TCGGTTGTGT CCCCGTCTTT TGTACCAACA GGGGAGAAGC CATGTGAGCA AGTCCAGTTC 2040
CAGCCCAACA CAGTGAACAC TTTGGCCTGC CCGCTCCTCT CCAACCTGGC GACCCGACTC 2100
TGGCTACGCA ACGGGGCCCC CGTCAATGCC TCGGCCTCCT GCCACGTGCT ACCCACTGGG 2160
GACCTGCTGC TGGTGGGCAC CCAACAGCTG GGGGAGTTCC AGTGCTGGTC ACTAGAGGAG 2220
GGCTTCCAGC AGCTGGTAGC CAGCTACTGC CCAGAGGTGG TGGAGGACGG GGTGGCAGAC 2280
CAAACAGATG AGGGTGGCAG TGTACCCGTC ATTATCAGCA CATCGCGTGT GAGTGCACCA 2340
GCTGGTGCAA AGGCCAGCTG GGGTGCAGAC AGGTCCTACT GGAAGGAGTT CCTGGTGATG 2400
TGCACGCTCT TTGTGCTGGC CGTGCTGCTC CCAGTTTTAT TCTTGCTCTA CCGGCACCGG 2460
AACAGCATGA AAGTCTTCCT GAAGCAGGGG GAATGTGCCA GCGTGCACCC CAAGAACTGC 2520
CCTGTGGTGC TGCCCCCTGA GACCCGCCCA CTCAACGGCC TAGGGCCCCG TAGCACCCCG 2580
CTCGATCACC GAGGGTACCA GTCCCTGTCA GACAGCCCCC CGGGGTCCGG AGTCTTCACT 2640
GAGTCAGAGA AGAGGCCACT CAGCATCCAA GACAGCTTCG TGGAGGTATC CCCAGTGTGC 2700
CCCCGGCCCC GGGTCCGGCCT TGGCTCGGAG ATCCGTGACT CTGTGGTGTG AGAGCTGACT 2760
TCCAGAGGAC GCTGCCCTGG CTTCAGGGGC TGTGAATGCT CGGAGAGGGT CAACTGGACC 2820
TCCCCTCCGC TCTGCTCTTC GTGGAACACG ACCGTGGTGC CCGGCCCTTG GGAGCCTTGG 2880
GGCCAGCTGG CCTGCTGCTC TCCAGTCAAG TAGCGAAGCT CCTACCACCC AGACACCCAA 2940
ACAGCCGTGG CCCCAGAGGT CCTGGCCAAA TATGGGGGCC TGCCTAGGTT GGTGGAACAG 3000
TGCTCCTTAT GTAAACTGAG CCCTTTGTTT AAAAAACAAT TCCAAATGTG AAACTAGAAT 3060
GAGAGGGAAG AGATAGCATG GCATGCAGCA CACACGGCTG CTCCAGTTCA TGGCCTCCCA 3120
GGGGTGCTGG GGATGCATCC AAAGTGGTTG TCTGAGACAG AGTTGGAAAC CCTCACCAAC 3180
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TGGCCTCTTC ACCTTCCACA TTATCCCGCT GCCACCGGCT GCCCTGTCTC ACTGCAGATT   3240
CAGGACCAGC TTGGGCTGCG TGCGTTCTGC CTTGCCAGTC AGCCGAGGAT GTAGTTGTTG   3300
CTGCCGTCGT CCCACCACCT CAGGGACCAG AGGGCTAGGT TGGCACTGCG GCCCTCACCA   3360
GGTCCTGGGC TCGGACCCAA CTCCTGGACC TTTCCAGCCT GTATCAGGCT GTGGCCACAC   3420
GAGAGGACAG CGCGAGCTCA GGAGAGATTT CGTGACAATG TACGCCTTTC CCTCAGAATT   3480
CAGGGAAGAG ACTGTCGCCT GCCTTCCTCC GTTGTTGCGT GAGAACCCGT GTGCCCCTTC   3540
CCACCATATC CACCCTCGCT CCATCTTTGA ACTCAAACAC GAGGAACTAA CTGCACCCTG   3600
GTCCTCTCCC CAGTCCCCAG TTCACCCTCC ATCCCTCACC TTCCTCCACT CTAAGGGATA   3660
TCAACACTGC CCAGCACAGG GGCCCTGAAT TTATGTGGTT TTTATACATT TTTTAATAAG   3720
ATGCACTTTA TGTCATTTTT TAATAAAGTC TGAAGAATTA CTGTTT
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Seq ID NO: 193 Protein sequence
Protein Accession #: XP_044533.3

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1          11         21         31         41         51
|          |          |          |          |          |
MLRTAMGLRS WLAAPWGALP PRPPLLLLLL LLLLLQPPPP TWALSPRISL PLGSEERPFL   60
RFEAEHISNY TALLLSRDGR TLYVGAREAL FALSSNLSFL PGGEYQELLW GADAEKKQQC   120
SFKGKDPQRD CQNYIKILLP LSGSHLFTCG TAAFSPMCTY INMENFTLAR DEKGNVLLED   180
GKGRCPFDPN FKSTALVVDG ELYTGTVSSF QGNDPAISRS QSLRPTKTES SLNWLQDPAF   240
VASAYIPESL GSLQGDDDKI YFFFSETGQE FEFFENTIVS RIARICKGDE GGERVLQQRW   300
TSFLKAQLLC SRPDDGFPFN VLQDVFTLSP SPQDWRDTLF YGVFTSQWHR GTTEGSAVCV   360
PTMKDVQRVF SGLYKEVNRE TQQWYTVTHP VPTPRPGACI TNSARERKIN SSLQLPDRVL   420
NFLKDHPLMD GQVRSRMLLL QPQARYQRVA VHRVPGLHHT YDVLPLGTGD GRLHKAVSVG   480
PRVHIIEELQ IFSSGQPVQN LLLDTHRGLL YAASHSGVVQ VPMANCSLYR SCGDCLLARD   540
PYCAWSGSSC KHVSLYQPQL ATRPWIQDIE GASAKDLCSA SSVVSPSFVP TGEKPCEQVQ   600
FQPNTVNTLA CPLLSNLATR LWLRNGAPVN ASASCHVLPT GDLLLVGTQQ LGEFQCWSLE   660
EGFQQLVASY CPEVVEDGVA DQTDEGGSVP VIISTSRVSA PAGGKASWGA DRSYWKEFLV   720
MCTLFVLAVL LPVLFLLYRH RNSMKVFLKQ GECASVHPKT CPVVLPPETR PLNGLGPPST   780
PLDHRGYQSL SDSPPGSRVP TESEKRPLSI QDSFVEVSPV CPRPRVRLGS EIRDSVV
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Seq ID NO: 194 DNA sequence
Nucleic Acid Accession #: NM_022819.1
Coding sequence: 1..635

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1          11         21         31         41         51
|          |          |          |          |          |
ATGGCAGATG GGGCAAAGGC CAACCCCAAA GGGTTCAAAA AGAAGGTGCT GGATAGATGC   60
TTCTCTGGGT GGAGGGGCCC ACGCTTCGGG GCCTCCTGTC CTTCAAGAAC CTCCAGGTCT   120
AGCCTGGGTA TGAAGAAGTT CTTCACCGTG GCCATCCTTG CTGGCAGCGT TCTGTCCACA   180
GCTCACGGCA GCCTGCTCAA CCTGAAGGCC ATGGTGGAGG CCGTCACAGG GAGGAGCGCC   240
ATCCTGTCCT TCGTGGGCTA CGGTTGCTAC TGTGGGCTGG GGGGCCGTGG CCAGCCCAAG   300
GATGAGGTGG ACTGGTGCTG CCACGCCCAC GACTGCTGCT ACCAGGAACT CTTTGACCAA   360
GGCTGTCACC CCTATGTGGA CCACTATGAT CACACCATCG AGAACAACAC TGAGATAGTC   420
TGCAGTGACC TCAACAAGAC AGAGTGTGAC AAGCAGACAT GCATGTGTGA CAAGAACATG   480
GTTCTGTGCC TCATGAACCA GACGTACCGA GAGGAGTACC GTGGCTTCCT CAATGTCTAC   540
TGCCAGGGCC CCACGCCCAA CTGCAGCATC TATGAACCGC CCCCTGAGGA GGTCACCTGC   600
AGTCACCAAT CCCCAGCGCC CCCCGCCCCT CCCTAG                             
```

Seq ID NO: 195 Protein sequence
Protein Accession #:   NP_073730

```
1          11         21         31         41         51
|          |          |          |          |          |
MADGAKANPK GFKKKVLDRC FSGWRGPRFG ASCPSRTSRS SLGMKKFFTV AILAGSVLST   60
AHGSLLNLKA MVEAVTGRSA ILSFVGYGCY CGLGGRGQPK DEVDWCCHAH DCCYQELFDQ   120
GCHPYVDHYD HTIENNTEIV CSDLNKTECD KQTCMCDKNM VLCLMNQTYR EEYRGFLNVY   180
CQGPTPNCSI YEPPPEEVTC SHQSPAPPAP P                                  
```

Seq ID NO: 196 DNA sequence
Nucleic Acid Accession #: XM_028196.1
Coding sequence: 1315..1791

```
1          11         21         31         41         51
|          |          |          |          |          |
GGCATTGATG CTGTGTGCGC GTGCGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT   60
GTGTGTGTGT GTCTGGAGTC ATGGCAGGGT CCCTTTCTGT CTGTCTCCTT GCTCTGCCCC   120
AGACTGGGGG GCTGCAGAGG TGAGGGTATC TGGCCTCAAC AGCTGCTTAT TCCCGATGGG   180
ATGGCCTGGG CTGGGCCCCT GAGGCCAGGC TGACTTGGAC ATGGCAAGAG GGGTCCCAGG   240
CTCTTGTGGG CAAAGCAGGG GAGGCGCCAA TGTGGAGGAA CAGAGTCTCC TGGCTGGGCTG   300
CTGCTCTCTG GAGCGGGTGG AGTCAGGGAA GAGCTGAGCT GGGGAGTCAG CCTGGGCCTG   360
GGGTCACCGT AGGCCCCATG TAGCACCCTG GTTCCCCTGC CTGTAGGTGA CAGGAGCCAG   420
CCCAGCCAGG TGTGCTCCCT CCCCAGGCCC TAGGCAGGCG GGTACAGGGG CCAGCAGCTG   480
CGCCCGCCCC ACCTTCCTTC CCACCCACAT GCCGAAGGGT GGCCAGGCAG GCAGGTGGAC   540
GAGTCCAGGC AGCGGCTGAG TCAGTGTGTG TGGAATGTTC TGGCCGCTCC CAGCTGCACC   600
CTGCCCCTAC CTGCCACCAC CTCACCTTCA TCCTCAGGCG GCGGCCCT GAGCCCCTGC     660
CAGGAATGCA CCTTTAGCCC AGGCCTGCTC AGTGAGCTCC GCCGACAGCC AGCCCTGCTC   720
CTCCCGCCAT GACCCTGCAG ACCCCTCTGG GCTTCCAAGT TCCTGGGGGC TGCAGTGAAC   780
ATGTCCACC TGCATGGCTG GCAAACCATG GTGGGCCCCA GCTGTGGTGC GTGCTGGGGT    840
AGAGGCAAGG AAGTGATGGG ACCGCAGAGA TGAGACCCCC AGGGATGAGA TGGGACCCCC   900
AGGCAGGGCC CAGGGTCCAG GGCCCAGGAG AGAGAAGCAG GGAGGGAGAG AGCTTCCTGG   960
TGGAGGACGC ATCCTACAGT GGGGGCAAGG GTGCTCTGAG GTCCGGTGAA GGCAGGGACT   1020
AGGCTGCCCA GGCCCTGCCT GCTTGGCTGG GGCTGGGGGC TGCTGGGAGG TGGCTGGGAG   1080
GCTGGGCCTG GGCAGCTAAG CTGGAGCTTT GGCCAGGGTC CAGAGCCTGG CTCCCTTCAG   1140
```

```
     CTTCCTGCTG CACAGAACCC TCGCCCCTGG CCACCCCGTG CTGCCTCCTT GCCCTGGCAG  1200
     ACCCAGCACT GGCTGCTGCT AGTCAGATGG GGTAGCGGGC AGGGGCCGGA GGGGCCACCC  1260
     TCCCAGCTGA CCCAGCCTCC TGGGCCGCTT CTTCCAAACC AGCAGGGTAG AAAGATGGGG  1320
     CACCCACCAG TCTCTCCCAG TGCCCCGGCC CCAGCTGGCA CCACAGCTAT ACCTGGGCTT  1380
5    ATTCCAGACC TTGTCGCCGG GACCCCCTGT GAGTTGTGGG ATTCCCAAGA GGGGTGTGGG  1440
     GATAACCCAG CCAAGTGGGG GCTGCAGCTG TCCACAGATG CACTCAGCCT GGCCTCTACC  1500
     CCAGGGCCCC GCTGGGCTCT CATTGCCGGC GCCCTTGCCG CGGGCGTCCT CCTCGTCTCC  1560
     TGCCTCCTCT GTGCTGCCTG CTGCTGCTGC CGCCGCCACA GGAAGAAGCC CAGGGACAAG  1620
     GAGTCCGTGG GTCTGGGCAG TGCCCGCGGC ACCACCACCA CCCACCTGGT GAGGAGCGGC  1680
10   TCCTTGCTCA CTCAGTCCAG AGAGGGCTTG AAATCCAGGC TCCAGAGCCC AGGGCAGCGA  1740
     GGCGAGTTCA GCCCCAGGGA TGGTTTAACC CCCACAGAGG CAGGGCGTTG AGGACCTTCC  1800
     TGGCAGGGAA AGTGGGTGAA CAGAGGTGAG AAGGAGGCCA TGCAACAGGG GCTGCCCCAT  1860
     GGGCCCGAGG GAGCCACAGC GGGTTCTTGA GGAAGGCAGG GGGTACCCCA GATGCCACGT  1920
     TTTGGGTGGG TTTGGCCGGT CTCACAGAGC GAAGCCGACG ATTTGTGCCT GTTGGGTGGC  1980
15   CTGGCCTGGA GGCGGGGGGT CTTGACCCAT GTCATGCAAG GGCTGCCCGG GAGCCCAGGG  2040
     CTCTGATGAG GCATGATGTC AGCACCCACCT GCCCCTTGTC CCAACTCACT CCAGGTGCAA  2100
     CCTGATGTGG ATGGCCTGGA GTCCAGCCCG GGGGATGCTC AGCAATGGGG GTGCCTGCAG  2160
     CTCTCCCTGG AGTTCGACTT TGGAAGCCAG GAGGTGAAGG GCCCCGCTGC GCAGGACCAG  2220
     CGGTTCTGCG AGTTTCCGGA AAGGGTGACG GGGGAAGGGC AGACCCCATG CCCTGGGTGG  2280
20   TGGGGAGCTG ACAGGGCAGG GGCCCTTGGC TGAGCCCACC CCGCTGGCTC CCAGATCAGG  2340
     GTGGGCTGA GGCAGGCAGC CGACCTGAGG CCTGGGGGCA CCGTGGACCC CTATGCCCGG  2400
     GTCAGCGTCT CCACCCAGGC CGGACACAGA CATGAGACAA AAGTGCACCG AGGCACGCTC  2460
     TGCCCCGTGT TTGACGAGAC CTGCTGCTTC CACGTGAGTC AGGGATGGTC GGCTGGGTGG  2520
     GCCTGGACGG CTGGATGGGC CTGGGCTGGG TGGGCCTGGG CAGCTGGGTG GGCCTGGGCA  2580
25   GCTGGGTGGG CCTGAGCTAG GGCAGCAGGG CCTGGCTCAC CAGATCCCGC AGGCGGAGCT  2640
     AGGCGGAGCT GCCAGGGGCC ACCCTGCAGG TGCAGCTTTT CAACTTCAAG CGCTTCTCGG  2700
     GGCATGAGCTG CCTGGGTGAG CTCCGTCTGC CACTGGGCAC CGTGGATCTG CAGCATGTTC  2760
     TGGAGCACTG GTACCTGCTG GGCCCGCCGG CTGCCACTCA GGTGAGGTGC TGGTCACCAG  2820
30   GCCACAGCCC AAGGCAGAGC TGGCAGGGAC CCTGCCCTAT GGGCCATCGG AAAGACAGGC  2880
     CTGATGGGCA GCATTTTCGG GGGTCTGAGC CCCAACTCGG CCAGAATCAC CCTCCCGGGC  2940
     TGAAGCCCCT CTTGCTGCCC ACAGCCCGAG CAGGTCGGGG AGCTGTGCTT CTCTCTCCGG  3000
     TACGTGCCCA GCTCAGGCCG GCTGACCGTG GTGGTGCTGG AGGCTCGAGG CCTGCGTCCA  3060
     GGACTTGCAG AGCCCTACGT GAAGGTCCAG CTCATGCTGA ACCAGAGGAA GTGGAAGAAG  3120
35   AGAAAGACAG CCACCAAAAA GGGCACGGCG GCCCCCTACT TCAATGAGGC CTTCACCTTC  3180
     CTGGTGCCCT TCAGCCAGGT CCAGAATGTG GACCTGGTGC TGGCTGTCTG GGACCGCAGC  3240
     CTGCCGCTCC GAACTGAGCC CGTAGGCAAG GTGCACCTGG GTGCCCGGGC CTCGGGGCAG  3300
     CCCCTGCAGC ACTGGGCAGGA CATGCTGGCC CACGCCCGGC GGCCCATTGC CCAGCGGCAC  3360
     CCCCTGCGGC CAGCCAGGGA GGTGGACCGC ATGCTGGCCC TGCAGCCCCG CCTTCGCCTG  3420
40   CGCCTGCCCT TGCCCCACTC CTGAATGCAC CACATGCCTC TGTCTCCCCG CTGAGCCCAG  3480
     GCACTTGCCC AGGCCGCCCT GCAGGACCAC TGCAATAAAC GCCTTCTCCT GCC
```

Seq ID NO: 197 <u>Protein sequence</u>
Protein Accession #:   XP_028196.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MGHPPVSPSA PAPAGTTAIP GLIPDLVAGT PCELWDSQEG CGDNPAKWGL QLSTDALSLA   60
STPGPRWALI AGALAAGVLL VSCLLCAACC CCRRHRKKPR DKESVGLGSA RGTTTTHLVR  120
SGSLLTQSRE GLKSRLQSPG QRGEFSPRDG LTPTEAGR
```

Seq ID NO: 198 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_000612.2
Coding sequence: 553..1095

```
1          11         21         31         41         51
|          |          |          |          |          |
TTCTCCCGCA ACCTTCCCTT CGCTCCCTCC CGTCCCCCCC AGCTCCTAGC CTCCGACTCC   60
CTCCCCCCCT CACGCCCGCC CTCTCGCCTT CGCCGAACCA AAGTGGATTA ATTACACGCT  120
TTCTGTTTCT CTCCGTGCTG TTCTCTCCCG CTGTGCGCCT GCCCGCCTCT CGCTGTCCTC  180
TCTCCCCCTC GCCCTCTCTT CGGCCCCCCC CTTTCACGTT CACTCTGTCT CTCCCACTAT  240
CTCTGCCCCC CTCTATCCTT GATACAACGC CTGACCTCAT TTCCCGATAC CTTTTTCCCCC  300
CCGAAAAGTA CAACATCTGG CCCGCCCCAG CCCGAAGACA GCCCGTCCTC CCTGGACAAT  360
CAGACGAATT CTCCCCCCCC CCCCAAAAAA AAAAGCCATC CCCCCGCTCT GCCCCGTCGC  420
ACATTCGGCC CCGCGACTC GGCCAGAGCG GCGCTGGCAG AGGAGTGTCC GGCAGGAGGG  480
CCAACGCCCG CTGTTCGGTT TGCGACACGC AGCAGGGAGG TGGCGGCAG CGTCGCCGGC  540
TTCCAGACAC CAATGGGAAT CCCAATGGGG AAGTCGATGC TGGTGCTTCT CACCTTCTTG  600
GCCTTCGCCT CGTGCTGCAT TGCTGCTTAC CGCCCCAGTG AGACCCTGTG CGGCGGGGAG  660
CTGGTGGACA CCCTCCAGTT CGTCTGTGGG GACCGCGGCT TCTACTTCAG CAGGCCCGCA  720
AGCCGTGTGA GCCGTCGCAG CGGTGGCATC GTTGAGGAGT GCTGTTCCG CAGCTGTGAC  780
CTGGCCCTCC TGGAGACGTA CTGTGCTACC CCCGCCAAGT CCGAGAGGGA CGTGTCGACC  840
CCTCCGACCG TGCTTCCGGA CAACTTCCCC AGATACCCCG TGGGCAAGTT CTTCCAATAT  900
GACACCTGGA AGCAGTCCAC CCAGCGCCTG CGCAGGGGCC TGCCTGCCCT CCTGCGTGCC  960
CGCCGGGGGTC ACGTGCTCGC CAAGGAGCTC GAGGCGTTCA GGGAGGCCAA ACGTCACCGT 1020
CCCCTGATTG CTCTACCCAC CCAAGACCCC GCCCACGGGG GCGCCCCCCC AGAGATGGCC 1080
AGCAATCGGA AGTGAGCAAA ACTGCCGCAA GTCTGCAGCC CGGCGCCACC ATCCTGCAGC 1140
CTCCTCCTGA CCACGGACGT TTCCATCAGG TTCCATCCCG AAAATCTCTC GGTTCCACGT 1200
CCCCCTGGGG CTTCTCCTGA CCCAGTCCCC GTGCCCCGCC TCCCCGAAAC AGGCTACTCT 1260
CCTCGGCCCC CTCCATCGGG CTGAGGAAGC ACAGCAGCAT CTTCAAACAT GTACAAAATC 1320
GATTGGCTTT AAACACCCTT CACATACCCT CCCCCC
```

Seq ID NO: 199 <u>Protein sequence</u>
Protein Accession #: NP_000603.1

```
1          11         21         31         41         51
```

```
        |           |           |           |           |           |
        MGIPMGKSML  VLLTFLAFAS  CCIAAYRPSE  TLCGGELVDT  LQFVCGDRGF  YPSRPASRVS   60
        RRSRGIVEEC  CFRSCDLALL  ETYCATPAKS  ERDVSTPPTV  LPDNFPRYPV  GKFFQYDTWK  120
        QSTQRLRRGL  PALLRARRGH  VLAKELEAFR  EAKRHRPLIA  LPTQDPAHGG  APPEMASNRK
```

Seq ID NO: 200 <u>DNA sequence</u>
Nucleic Acid Accession #: AK057131.1
Coding sequence: 61..1146

```
        1           11          21          31          41          51
        |           |           |           |           |           |
        AGTCTGGGCG  TTTAGGTCAG  AACTACCCCG  GTAGCCTGAC  AGCAGGAGCT  CGAGAGAAGC   60
        ATGGCTCAGC  GGTGCGTTTG  CGTGCTGGCC  CTGGTGGCTA  TGCTGCTCCT  AGTTTTCCCT  120
        ACCGTCTCCA  GATCGATGGG  CCCGAGGAGC  GGGGAGCATC  AAAGGGCGTC  GCGAATCCCT  180
        TCTCAGTTCA  GCAAAGAGGA  ACGCGTCGCG  ATGAAAGAGG  CGCTGAAAGG  TGCCATCCAG  240
        ATTCCAACAG  TGACTTTTAG  CTCTGAGAAG  TCCAATACTA  CAGCCCTGGC  TGAGTTCGGA  300
        AAATACATTC  ATAAAGTCTT  TCCTACAGTG  GTCAGCACCA  GCTTTATCCA  GCATGAAGTC  360
        GTGGAAGAGT  ATAGCCACCT  GTTCACTATC  CAAGGCTCGG  ACCCCAGCTT  GCAGCCCTAC  420
        CTGCTGATGG  CTCACTTTGA  TGTGGTGCCT  GCCCCTGAAG  AAGGCTGGGA  GGTGCCCCCA  480
        TTCTCTGGGT  TGGAGCGTGA  TGGCGTCATC  TATGGTTGGG  GCACACTGGA  CGACAAGAAC  540
        TCTGTGATGG  CATTACTGCA  GGCCTTGGAG  CTCCTGCTGA  TCAGGAAGTA  CATCCCCGA   600
        AGATCTTTCT  TCATTTCTCT  GGGCCATGAT  GAGGAGTCAT  CAGGGACAGG  GGCTCAGAGG  660
        ATCTCAGCCC  TGCTACAGTC  AAGGGGCGTC  CAGCTAGCCT  TCATTGTGGA  CGAGGGGGGC  720
        TTCATCTTGG  ATGATTTCAT  TCCTAACTTC  AAGAAGCCCA  TCGCCTTGAT  TGCAGTCTCA  780
        GAGAAGGGTT  CCATGAACCT  CATGCTGCAA  GTAAACATGA  CTTCAGGCCA  CTCTTCAGCT  840
        CCTCCAAAGG  AGACAAGCAT  TGGCATCCTT  GCAGCTGCTG  TCAGCCGATT  GGAGCAGACA  900
        CCAATGCCTA  TCATATTTGG  AAGCGGGACA  GTGGTGACTG  TATTGCAGCA  ACTGGCAAAT  960
        GAGGTTTATG  GAGAGAAATC  CCTTAACCAA  TGCAATAATC  AGGACCACCA  CGGCACTCAC  1020
        CATATTCAAA  GCAGGGGTCA  AGTTCAATGT  CATCCCCCCA  GTGGCCCAGG  CCACAGTCAA  1080
        CTTCCGGATT  CACCCTGGAC  AGACAGTCCA  GAGAGGTCCTA  GAACTCACGA  AGAACATTGT  1140
        GGCTGATAAC  AGAGTCCAGT  TCCATGTGTT  GAGTGCCTTT  GACCCCTCC   CCGTCAGCCC  1200
        TTCTGATGAC  AAGGCCTTGG  GCTACCAGCT  GCTCCGCCAG  ACCGTACAGT  CCGTCTTCCC  1260
        GGAAGTCAAT  ATTACTGCCC  CAGTTACTTC  TATTGGCAAC  ACAGACAGCC  GATTCTTTAC  1320
        AAACCTCACC  ACTGGCATCT  ACAGGTTCTA  CCCCATCTAC  ATACAGCCTG  AAGACTTCAA  1380
        ACGCATCCAT  GGAGTCAACG  AGAAAATCTC  AGTCCAAGCC  TATGAGACCC  AAGTGAAATT  1440
        CATCTTTGAG  TTGATTCAGA  ATGCTGACAC  AGACCAGGAG  CCAGTTTCTC  ACCTGCACAA  1500
        ACTGTGAGGT  CAAGGGGCCT  GCTGGGTTAG  GCATGCCCGA  CCCCGGGACA  GGACTAACCC  1560
        AAGGGGGAAA  GCTAGTGTTG  ATGAAACTTT  TGATCAAAAC  CACATTGTAA  AACATTGCCC  1620
        ATCTGTCTTG  CTCACTCTTA  AACTCTCCCA  AGAACAAGGC  CGGGGTAAGG  TAAAGTCAGC  1680
        AGAAATCTGG  CTTCTCCCTT  CCTCCCGACA  TCTGCATCCC  TTGATCCACT  GGCATTTGCT  1740
        GCCCTCTTGT  CCCTTATCTG  TCTTATGCTG  GTTATTTCAC  TGCTTCACCT  TCCAGGCTTG  1800
        ACTTAACAAA  TGTAGATTTG  AGAAATCTCA  ACCAGTTGTT  ACCTGATAGG  AGTCTTTAAT  1860
        TTAGGGCACT  CTTGCTGGGA  TGCTTTCTCC  AGAGCTTATA  TATTTCTTCT  TACTAGAACT  1920
        TTCTTCCCCC  TTTTATTCCC  CTCTCTTCTT  GGACTCATGA  GCTGTCTCTT  CATCTCTCCT  1980
        CTCTCTCCTG  CATCTCTCCC  CTTACTCTTC  AATTTATTCT  ACTTCTGGAC  CTGGACTTAC  2040
        CCAAACTGTG  ATACTACCAT  AATTGTCACC  ATAATCAGTC  AAATAAAGTG  ATCTGTGCAT  2100
        C
```

Seq ID NO: 201 <u>Protein sequence</u>
Protein Accession #: BAB71368.1

```
        1           11          21          31          41          51
        |           |           |           |           |           |
        MAQRCVCVLA  LVAMLLLVFP  TVSRSMGPRS  GEHQRASRIP  SQFSKEERVA  MKEALKGAIQ   60
        IPTVTPSSEK  SNTTALAEFG  KYIHKVFPTV  VSTSFIQHEV  VEEYSHLFTI  QGSDPSLQPY  120
        LLMAHFDVVP  APEEGWEVPP  FSGLERDGVI  YGWGTLDDKN  SVMALLQALE  LLLIRKYIPR  180
        RSFFISLGHD  EESSGTGAQR  ISALLQSRGV  QLAFIVDEGG  FILDDFIPNF  KKPIALIAVS  240
        EKGSMNLMLQ  VNMTSGHSSA  PPKETSIGIL  AAAVSRLEQT  PMPIIFGSGT  VVTVLQQLAN  300
        EVYGEKSLNQ  CNNQDHHGTH  HIQSRGQVQC  HPPSGPGHSQ  LPDSPWTDSP  RGPRTHEEHC  360
        G
```

Seq ID NO: 202 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_004217.1
Coding sequence: 58..1092

```
        1           11          21          31          41          51
        |           |           |           |           |           |
        GGCCGGGAGA  GTAGCAGTGC  CTTGGACCCC  AGCTCTCCTC  CCCCTTTCTC  TCTAAGGATG   60
        GCCCAGAAGG  AGAACTCCTA  CCCCCTGGCCC  TACGGCCGAC  AGACGGCTCC  ATCTGGCCTG  120
        AGCACCCTGC  CCCAGCGAGT  CCTCCGGAAA  GAGCCTGTCA  CCCCATCTGC  ACTTGTCCTC  180
        ATGAGCCGCT  CCAATGTCCA  GCCCACAGCT  GCCCCTGGCC  AGAAGGTGAT  GGAGAATAGC  240
        AGTGGGACAC  CCGACATCTT  AACGCGGCAC  TTCACAATTG  ATGACTTTGA  GATTGGGCGT  300
        CCTCTGGGCA  AAGGCAAGTT  TGGAAACGTG  TACTTGGCTC  GGGAGAAGAA  AAGCCATTTC  360
        ATCGTGGCGC  TCAAGGTCCT  CTTCAAGTCC  CAGATAGAGA  AGGAGGGCGT  GGAGCATCAG  420
        CTGCGCAGAG  AGATCGAAAT  CCAGGCCCAC  CTGCACCATC  CCAACATCCT  GCGTCTCTAC  480
        AACTATTTTT  ATGACCGGAG  GAGGATCTAC  TTGATTCTAG  AGTATGCCCC  CCGCGGGGAG  540
        CTCTACAAGG  AGCTGCAGAA  GAGCTGCACA  TTTGACGAGC  AGCGAACAGC  CACGATCATG  600
        GAGGAGTTGG  CAGATGCTCT  AATGTACTGC  CATGGGAAGA  AGGTGATTCA  CAGAGACATA  660
        AAGCCAGAAA  ATCTGCTCTT  AGGGCTCAAG  GGAGAGCTGA  AGATTGCTGA  CTTCGGCTGG  720
        TCTGTGCATG  CGCCCTCCCT  GAGGAGGAGA  ACAATGTGTG  GCACCCTGGA  CTACCTGCCC  780
        CCAGAGATGA  TTGAGGGGCG  CATGCACAAT  GAGAAGGTGG  ATCTGTGGTG  CATTGGAGTG  840
        CTTTGCTATG  AGCTGCTGGT  GGGGAACCCA  CCCTTTGAGA  GTGCATCACA  CAACGAGACC  900
        TATCGCCGCA  TCGTCAAGGT  GGACCTAAAG  TTCCCCGCTT  CTGTGCCCAC  GGGAGCCCAG  960
        GACCTCATCT  CCAAACTGCT  CAGGCATAAC  CCCTCGGAAC  GGCTGCCCCT  GGCCCAGGTC  1020
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1033

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TCAGCCCACC CTTGGGTCCG GGCCAACTCT CGGAGGGTGC TGCCTCCCTC TGCCCTTCAA 1080
TCTGTTGTCGCT GATGGTCCCT GTCATTCACT CGGGTGCGTG TGTTGTATG TCTGTGTATG 1140
TATAGGGGAA AGAAGGGATC CCTAACTGTT CCCTTATCTG TTTTCTACCT CCTCCTTTGT 1200
TTAATAAAGG CTGAAGCTTT TTGT
```

Seq ID NO: 203 Protein sequence
Protein Accession #: NP_004208

```
1          11         21         31         41         51
|          |          |          |          |          |
MAQKENSYPW PYGRQTAPSG LSTLPQRVLR KEPVTPSALV LMSRSNVQPT AAPGQKVMEN  60
SSGTPDILTR HFTIDDFEIG RPLGKGKFGN VYLAREKKSH FIVALKVLFK SQIEKEGVEH 120
QLRREIEIQA HLHHPNILRL YNYFYDRRRI YLILEYAPRG ELYKELQKSC TFDEQRTATI 180
MEELADALMY CHGKKVIHRD IKPENLLLGL KGELKIADFG WSVHAPSLRR KTMCGTLDYL 240
PPEMIEGRMH NEKVDLWCIG VLCYELLVGN PPFESASHNE TYRRIVKVDL KFPASVPTGA 300
QDLISKLLRH NPSERLPLAQ VSAHPWVRAN SRRVLPPSAL QSVA
```

Seq ID NO: 204 DNA sequence
Nucleic Acid Accession #: AK055663
Coding sequence: 38..1423

```
1          11         21         31         41         51
|          |          |          |          |          |
AGAACGGCTT CCGGCGGGAG CTGTGCAGCT CCTTATCATG GGGACAATTC ATCTCTTTCG  60
AAAACCACAA AGATCCTTTT TTGGCAAGTT GTTACGGGAA TTTAGACTTG TAGCAGCTGA 120
CCGAAGGTCC TGGAAGATAC TGCTCTTTGG TGTAATAAAC TTGATATGTA CTGGCTTCCT 180
GCTTATGTGG TGCAGTTCTA CTAATAGTAT AGCTTTAACT GCCTATACTT ACCTGACCAT 240
TTTTGATCTT TTTAGTTTAA TGACATGTTT AATAAGTTAC TGGGTAACAT TGAGGAAACC 300
TAGCCCTGTC TATTCATTTG GGTTTGAAAG ATTAGAAGTC CTGGCTGTAT TTGCCTCCAC 360
AGTCTTGGCA CAGTTGGGAG CTCTCTTTAT ATTAAAAGAA AGTGCAGAAC GCTTTTTGGA 420
ACAGCCCGAG ATACACACGG GAAGATTATT AGTTGGTACT TTTGTGGCTC TTTGTTTCAA 480
CCTGTTCACG ATGCTTTCTA TTCGGAATAA ACCTTTTGCT TATGTCTCAG AAGCTGCTAG 540
TACGAGCTGG CTTCAAGAGC ATGTTGCAGA TCTTAGTCGA AGCTTGTGTG GAATTATTCC 600
GGGACTTAGC AGTATCTTCC TTCCCCGAAT GAATCCATTT GTTTTGATTG ATCTTGCTGG 660
AGCATTTGCT CTTTGTATTA CATATATGCT CATTGAAATT AATAATTATT TTGCCGTAGA 720
CACTGCCTCT GCTATAGCTA TTGCCTTGAT GACATTTGGC ACTATGTATC CCATGAGTGT 780
GTACAGTGGG AAAGTCTTAC TCCAGACAAC ACCACCCCAT GTTATTGGTC AGTTGGACAA 840
ACTCATCAGA GAGGTATCTA CCTTAGATGG AGTTTTAGAA GTCCGAAATG AACATTTTTG 900
GACCCTAGGT TTTGGCTCAT TGGCTGGATC AGTGCATGTA AGAATTCGAC GAGATGCCAA 960
TGAACAAATG GTTCTTGCTC ATGTGACCAA CAGGCTGTAC ACTCTAGTGT CTACTCTAAC 1020
TGTTCAAATT TTCAAGGATG ACTGGATTAG GCCTGCCTTA TTGTCTGGGC CTGTTGCAGC 1080
CAATGTCCTA AACTTTTCAG ATCATCACGT AATCCCAATG CCTCTTTTAA AGGGTACTGA 1140
TGATTTGAAC CCAGTTACAT CAACTCCAGC TAAACCTAGT AGTCCACCTC CAGAATTTTC 1200
ATTTAACACT CCTGGGAAAA ATGTGAACCC AGTTATTCGT CTAAACACAC AAACAAGGCC 1260
TTATGGTTTT GGTCTCAATC ATGGACACAC ACCTTACAGC AGCATGCTTA ATCAAGGACT 1320
TGGAGTTCCA GGAATTGGAG CAACTCAAGG ATTGAGGACT GGTTTTACAA ATATACCAAG 1380
TAGATATGGA ACTAATAATA GAATTGGACA ACCAAGACCA TGATAGACTC TAACTTATTT 1440
TTATAAGGAA TATTGACTCC TTGGCTTCCA ATTTATTTAG TAATCCAACT TTGCATTGAC 1500
TGTTTAATCA TTTACTCTAA ATGTTAGATA ATAGTAGTCT TGTTCACATT TCATGAAACC 1560
TATGAAACTA TATTTTTGTA AAATGTATTT GTGACAGTGA AATCCTCGTA AATGTTAAAG 1620
GCTTTAAATA GGCTTCCTTT AGAAAATGTG TTTCTTTAAA TTTGGATTTT GGTATCTTTG .1680
GTTTTGTAGT TGACTGCAGT GTGATGTGAC CTTACCTTTA TAAGAGCCAC TTGATGGAGT 1740
AGATCTGTCA CATTACTAAG ATACGATATT TCTTTTTTTT TCCGAGACGG AGTCTTGCTC 1800
TGCCACTGTG CCCGGCCAAT ACATTATTAT TAACTTAAGG CTGTACTTTA TTAAGGCTTC 1860
CTTAGTTTTT GTTTTGTTTT GTTTTTTGAG ATGGAGTCTC ACTCTGTCGC CCAGGCTGGA 1920
ATGCAGTGGC ATGATCTCAG CTCACTGCAA CCTCTGCCTC CTGAGTTCAA ATGATTCTCC 1980
TGCCTCAGCC TCCCGAGTAG CTGGGATTAC AGGCACCTGC CACCAGCGCC AGCTAATTTT 2040
TGTATTTTTA GTAAAGACGG GGGATTTCAC CATGTTGGCC AGGCTGGTCT TGAACTCCTG 2100
ACCTCATGAT CCACCCACCT TAGCCTCCCA AAGTGCTGGG ATTAGGTGTG AGCCACCGCA 2160
CCTGACCGAT ATTTTCTTTA ATGAAATTTA TAAATATGCT TCTTGAATAA TACACATTTT 2220
GGGAAAGGGA AAAATGTCTG TTCAAAAAGT AAAGGTCTCT TTTATAGCTT TTCCAAACTT 2280
AATTGCTAAA TTTTTCTTTG AGGTTCTCCT GAATTATGTC TTACAAACTA AAAGCAAAAA 2340
TTTTTAGCAG AAAATTTTGGA ATACATTCTA TCTAGCACAA TTTGAATTTT TAATTATCAA 2400
GATTTTTGTT AAAGTTTCTC TCCTTTAAAA ATTTTAGTAC ATTTGTAAAT
```

Seq ID NO: 205 Protein sequence
Protein Accession #: BAB70980.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MGTIHLFRKP QRSFFGKLLR EFRLVAADRR SWKILLFGVI NLICTGFLLM WCSSTNSIAL  60
TAYTYLTIFD LFSLMTCLIS YWVTLRKPSP VYSFGFERLE VLAVPASTVL AQLGALFILK 120
ESAERFLEQP EIHTGRLLVG TFVALCFNLF TMLSIRNKPF AYVSEAASTS WLQEHVADLS 180
RSLCGIIPGL SSIFLPRMNP FVLIDLAGAF ALCITYMLIE INNYFAVDTA SAIAIALMTF 240
GTMYPMSVYS GKVLLQTTPP HVIGQLDKLI REVSTLDGVL EVRNEHFWTL GFGSLAGSVH 300
VRIRRDANEQ MVLAHVTNRL YTLVSTLTVQ IFKDDWIRPA LLSGPVAANV LNFSDHHVIP 360
MPLLKGTDDL NPVTSTPAKP SSPPPEFSFN TPGKNVNPVI LLNTQTRPYG PGLNHGHTPY 420
SSMLNQGLGV PGIGATQGLR TGFTNIPSRY GTNNRIGQPR P
```

Seq ID NO: 206 DNA sequence
Nucleic Acid Accession #: NM_016361.1
Coding sequence: 397..1662

```
1          11         21         31         41         51
```

```
    |         |         |         |         |         |
GGAACTCAGG GCCGGCTCCT GTTCCTTCAA GAGTGCTGGA GGCCAAACTT GAAATACAAG     60
TTTAATGTTC CTCGTCGGGC AAAAGATAAG GATCCGATCT CCCCCGGCCC GGTGTGCAGC    120
AGGAGCGACC AACCCCGACC CGGGTTAAAA CTCCCAGGGA CTCTTCGCTG CTGCCACCTC    180
TTGTTCTCTC CCCCGGTTCCC ACTCGGGGTC TCCCTCAGGG CCGGGAGGCA CAGCGGTCCC   240
TGCTTGCTGA AGGGCTGGAT GTACGCATCC GCAGGTTCCC GCGGACTTGG GGGCGCCCGC    300
TGAGCCCCGG CGCCCGCAGA AGACTTGTGT TTGCCTCCTG CAGCCTCAAC CCGGAGGCAG    360
CGAGGGCCTA CCACCATGAT CACTGGTGTG TTCAGCATGC GCTTGTGGAC CCCAGTGGGC    420
GTCCTGACCT CGCTGGCGTA CTGCCTGCAC CAGCGGCGGG TGGCCCTGGC CGAGCTGCAG    480
GAGGCCGATG GCCAGTGTCC GGTCGACCGC AGCCTGCTGA AGTTGAAAAT GGTGCAGGTC    540
GTGTTTCGAC ACGGGGCTCG GAGTCCTCTC AAGCCGCTCC CGCTGGAGGA GCAGGTAGAG    600
TGGAACCCCC AGCTATTAGA GGTCCCACCC CAAACTCAGT TTGATTACAC AGTCACCAAT    660
CTAGCTGGTG GTCCGAAACC ATATTCTCCT TACGACTCTC AATACCATGA GACCACCCTG    720
AAGGGGGGCA TGTTTGCTGG GCAGCTGACC AAGGTGGGCA TGCAGCAAAT GTTTGCCTTG    780
GGAGAGAGAC TGAGGAAGAA CTATGTGGAA GACATTCCCT TTCTTTCACC AACCTTCAAC    840
CCACAGGAGG TCTTTATTCG TTCCACTAAC ATTTTTCGGA ATCTGGAGTC CACCCGTTGT    900
TTGCTGGCTG GGCTTTTCCA GTGTCAGAAA GAAGGACCCA TCATCATCCA CACTGATGAA    960
GCAGATTCAG AAGTCTTGTA TCCCAACTAC CAAAGCTGCT GGAGCCTGAG GCAGAGAACC   1020
AGAGGCCGGA GGCAGACTGC CTCTTTACAG CCAGGAATCT CAGAGGATTT GAAAAAGGTG   1080
AAGGACAGGA TGGGCATTGA CAGTAGTGAT AAAGTGGACT TCTTCATCCT CCTGGACAAC   1140
GTGGCTGCCG AGCAGGCACA CAACCTCCCA AGCTGCCCCA TGCTGAAGAG ATTTGCACGG   1200
ATGATCGAAC AGAGAGCTGT GGACACATCC TTGTACATAC TGCCCAAGGA AGACAGGGAA   1260
AGTCTTCAGA TGGCAGTAGG CCCATTCCTC CACATCCTAG AGAGCAACCT GCTGAAAGCC   1320
ATGGACTCTG CCACTGCCCC CGACAAGATC AGAAAGCTGT ATCTCTATGC GGCTCATGAT   1380
GTGACCTTCA TACCGCTCTT AATGACCCTG GGGATTTTTG ACCACAAATG GCCACCGTTT   1440
GCTGTTGACC TGACCATGGA ACTTTACCAG CACCTGGAAT CTAAGGAGTG GTTTGTGCAG   1500
CTCTATTACC ACGGGAAGGA GCAGGTGCCG AGAGGTTGCC CTGATGGGCT CTGCCCGCTG   1560
GACATGTTCT TGAATGCCAT GTCAGTTTAT ACCTTAAGCC CAGAAAAATA CCATGCACTC   1620
TGCTCTCAAA CTCAGGTGAT GGAAGTTGGA AATGAAGAGT AACTGATTTA TAAAAGCAGG   1680
ATGTGTTGAT TTTAAAATAA AGTGCCTTTA TACAAAAAAA AAAAAAAAAA A
```

Seq ID NO: 207 Protein sequence
Protein Accession #: NP_057445.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MRLWTPVGVL TSLAYCLHQR RVALAELQEA DGQCPVDRSL LKLKMVQVVP RHGARSPLKP     60
LPLEEQVEWN PQLLEVPPQT QFDYTVTNLA GGPKPYSPYD SQYHETTLKG GMFAGQLTKV    120
GMQQMFALGE RLRKNYVEDI PPLSPTFNPQ EVFIRSTNIF RNLESTRCLL AGLFQCQKEG    180
PIIIHTDEAD SEVLYPNYQS CWSLRQRTRG RRQTASLQPG ISEDLKKVKD RMGIDSSDKV    240
DFFILLDNVA AEQAHNLPSC PMLKRPARMI EQRAVDTSLY ILPKEDRESL QMAVGPFLHI    300
LESNLLKAMD SATAPDKIRK LYLYAAHDVT FIPLLMTLGI FDHKWPPFAV DLTMELYQHL    360
ESKEWFVQLY YHGKEQVPRG CPDGLCPLDM FLNAMSVYTL SPEKYHALCS QTQVMEVGNE    420
E
```

Seq ID NO: 208 DNA sequence
Nucleic Acid Accession #: CAT cluster

```
1          11         21         31         41         51
|          |          |          |          |          |
TTTGAGGGGG TGGTGGGGCG AGTTTAATTC ATAAAGAAGC CTCCTGATCA GAAAGGGGCC     60
TAACAGCCTG CCCTTGGAGA GAAGTCCTTC CTTGAGGATA AGGCCTCCCA GGGGAGGAGG    120
TGCTGGGGGC CAGTGTTAGG CTTCAGGCCA TCCCTGGAGG CCAGTCCTGT GCTCAGCAAG    180
TAGTGGCAGA GCCTGGAGTG ATGAGTGGGA TGGCCTTCTC AGGTACAGGA CTGTGCTGCT    240
TCTGGCTGCT CTTGCATTTG CATTTGCCAC TCAGAACTGC CGCGATCCCA GCAATGGCCA    300
GGAGCCCTCC GCAGATCAGT CCGCTCAGCT GCAGGTTTTT CCAGTCATAG TAGAAGGGAT    360
CGTCTTTATT GGCAAATGGG TCATTGGCTT CCAAGGCAGT CAGGCCAACT GTGTGACTCT    420
GCAGGTTCCT CACTGCTCCT TCACCAGTGT CCTGCGAGGT CACCTTGGCG AGGGCTCACC    480
TGAGCTGGCA GCGCAG
```

Seq ID NO: 209 DNA sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..564

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGGAGCCCT GGGCGTGGCT GCAGGGTTTA AAGAGCCGAC CCACGTGCCC AGCAGCCTCC     60
TCAGATCCGT TCTCTGCGCT GCCAGCTCAG GACACTGGTG AAGGAGCAGT GAGGAACCTG    120
CAGAGTCACA CAGTTGGCCT GACTGCCTTG GAAGCCAATG ACCCATTTGC CAATAAAGAC    180
GATCCCTTCT ACTATGACTG GAAAAACCTG CAGCTGAGCG GACTGATCTG CGGAGGGCTC    240
CTGGCCATTG CTGGGATCGC GGCAGTTCTG AGTGGCAAAT GCAAATGCAA GAGCAGCCAG    300
AAGCAGCACA GTCCTGTACC TGAGAAGGCC ATCCCACTCA CTCTACCAGG CAGATTTCTC    360
ACCTTGGCCA AATCAAATAA ACCTTTATCT CCAAGCACCT TTGTCTTGGT GTTTGGCATC    420
AGCTACACAT CAGTCTTCCG AGTGCCTCTT TCTCGTCCCC TGTACCCTGC CATTCCTGGT    480
GATGCTGCTG CCCTCACATC AGGCCATCCA AGCATGCAGA ACATAAGCAT GCAGAACACT    540
GGAACGAAGG GCTGTACCTA ATGA
```

Seq ID NO: 210 Protein sequence
Protein Accession #: FGENESH predicted

```
1          11         21         31         41         51
|          |          |          |          |          |
MEPWAWLQGL KSRPTCPAAS SDPFSALPAQ DTGEGAVRNL QSHTVGLTAL EANDPFANKD     60
DPFYYDWKNL QLSGLICGGL LAIAGIAAVL SGKCKCKSSQ KQHSPVPEKA IPLITPGRFL    120
```

```
TLAKSNKPLS PSTFVLVFGI SYTSVFRVPL SASLYPAIPG DAAALTSGHP SMQNISMQNT  180
GTKGCT
```

Seq ID NO: 211 <u>DNA sequence</u>
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..318

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGCCCGGCC ACCCCGTCTG TGAAGTGAGG AGCACCTCTG CCCGGCTGCC CCGTCTGGGA   60
AGTGAGGAGC GCCTCTGCCC GGCTGCCACC CCGTCTGTGA GTGCCTGCTG CGCTGGGCCC  120
AGGCCGCCCG TGCCCTGCCA GGCCCTCCGG CCCCCCACCT TCCACCCCAG GGCCTGCTCC  180
TCACCCCAGG GTTCCATCTC CCTAGTTTCC ACCAGAGACT GGGTCTTCAT TCTCACCCTG  240
CTACACAGCC CCTACCAGAA CGTTCTGAAA TGCAAACCTA ACAACTGTCT CACCCCAGCA  300
GGAAACTCCC CAGGGTCCCG GGCCCCCTGC GGGGTTGCAG GCCTCACTCT TCGCGCCCAT  360
CCCTCCGCCC TGACCGCCCT GAGCTCGCCC CCAGTGCTGG CCCTTCACGT CCAGTTATCC  420
CTCCCAGCCT CCAAGGTCCC CGTTACCGAA GACCGCCACC ATCACGACAT AGCGCAGCAC  480
ATATGGGACA CTGGTGAAGG AGCAGTGAGG AACCTGCAGA GTCACACAGT TGGCCTGACT  540
GCCTTGGAAG CCAATGACCC ATTTGCCAAT AAAGACGATC CCTTCTACTA TGACTGGAAA  600
AACCTGCAGC TGAGCGGACT GATCTGCGGA GGGCTCCTGG CCATTGCTGG GATCGCGGCA  660
GTTCTGAGTG GCAAATGCAA ATGCAAGAGC AGCCAGAAGC AGCACAGTCC TGTACCTGAG  720
AAGGCCATCC CACTCATCAC TCCAGGCAGA TTTCTCACCT TGGCCAAATC AAATAAACCT  780
TTATCTCCAA GCACCTTTGT CTTGGTGTTT GGCATCAGCT ACACATCAGT CTTCCGAGTG  840
CCTCTTTCTG CGTCCCTGTA CCCTGCCATT CCTGGTGATG CTGCTGCCCT CACATCAGGC  900
CATCCAAGCA TGCAGAACAT AAGCATGCAG AACACTGGAA CGAAGGGCTG TACCTAA
```

Seq ID NO: 212 <u>Protein sequence</u>
Protein Accession #: FGENESH predicted

```
1          11         21         31         41         51
|          |          |          |          |          |
MPGHPVCEVR STSARLPRLG SEERLCPAAT PSVSACCAGP RPPVPCQALR PPTPHPRACS   60
SPQGSISLVS TRDWVFILTL LHSPYQNVLK CKPNNCLTPA GNSPGSRAPC GVAGLTLRAH  120
PSALTALSSP PVLALHVQLS LPASKVPVTE DRHHHDIAQH IWDTGEGAVR NLQSHTVGLT  180
ALEANDPFAN KDDPFYYDWK NLQLSGLICG GLLAIAGIAA VLSGKCKCKS SQKQHSPVPE  240
KAIPLITPGR FLTLAKSNKP LSPSTFVLVF GISYTSVFRV PLSASLYPAI PGDAAALTSG  300
HPSMQNISMQ NTGTKGCT
```

Seq ID NO: 213 <u>DNA sequence</u>
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..1758

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGATGGGGT CTCATGTTGC CCAGGCTGGT CTTGAACTCC TGGGCTCGAG TGACCCTCCT   60
GCCTTGGCCT CCGAAAGTGC TGGGATTACA GGACTGTTAT TACAGGAATC CATAACACTG  120
GAGGATGTGG CTGTGGACTT CACTTGGGAG GAGTGGCAAC TCCTGGGCGC TGCTCAGAAG  180
GACCTGTACC GGGATGTGAT GTTGGAGAAC TACAGCAACC TGGTGGCAGT GGGGTATCAA  240
GCCAGCAAAC CGGATGCACT CTTCAAGTTG GAACAAGGAG AACAACTGTG GACAATTGAA  300
GATGGAATCC ACAGTGGAGC CTGTTCAGGT TCTCCAAAGG TCCCGTTCTC CATTTTCTCA  360
TCTGTGCCCT TCACTCTTCA AAATTGCCTT CATTCTAACA TATGGAAAGT TGATCATGTG  420
CTGGAGCGCT TGCAGAGTGA AAGCCTGGTG AACAGAAGGA AACCATGTCA TGAACATGAT  480
GCATTTGAAA ATATTGTTCA TTGCAGCAAA AGTCAGTTTC TGTTAGGGCA AAATCATGAT  540
ATATTTGACT TACGTGGAAA AAGTTTGAAA TCCAATTTAA CTTTAGTTAA CCAGAGCAAA  600
GGCTATGAAA TAAAGAACTC TGTTGAGTTT ACTGGAAATG GGGACTCCTT TCTTCATGCT  660
AACCATGAAC GACTTCATAC TGCAATTAAA TTCCCTGCAA GTCAAAAACT CATCAGCACT  720
AAGTCCCAAT TCATCAGTCC CAAGCATCAG AAAACACGAA AATTAGAGAA GCATCATGTG  780
TGCAGTGAAT GTGGGAAAGC CTTCATCAAG AAGTCTTGGC TAACTGATCA CCAGGTAATG  840
CATACAGGAG AGAAACCCCA CAGATGTAGT CTATGTGAGA AAGCCTTCTC CAGAAAGTTC  900
ATGCTTACTG AACATCAGCG AACTCATACA GGAGAAAAAC CTTATGAATG CCCTGAATGT  960
GGCAAAGCCT TTCTCAAGAA ATCACGGCTC AACATACATC AGAAAACACA TACCGGAGAG 1020
AAACCCTATA TATGCAGTGA ATGTGGAAAA GGCTTCATCC AGAAAGGAAA TCTCATTGTA 1080
CACCAGCGAA TTCATACAGG TGAGAAACCT TATATATGCA ATGAATGTGG AAAAGGCTTC 1140
ATTCAGAAGA CGTGTCTCAT AGCACATCAG AGATTTCACA CAGGAAAGAC GCCCTTTGTG 1200
TGCAGTGAAT GTGGAAAATC CTGTTCTCAG AAATCAGGTC TCATTAAACA TCAAAGAATT 1260
CACACAGGAG AGAAACCCTT TGAATGTAGT GAATGTGGGA AAGCCTTTAG CACAAAGCAA 1320
AAGCTCATTG TCCATCCAAG GACTCATACA GGAGAGAGAC CCTATGGCTG TAACGAGTGT 1380
GGGAAAGCGT TTGCGTATAT GTCGTGTCTG GTTAAGCATA AGAGAATACA CACAAGGGAG 1440
AAACAAGAGA CAGCCAAGGT GGAAAATCCT CCTGCAGAGA GGCACAGCTC ATTACACACC 1500
AGTGATGTCA TGCAGGAGAA AAACTCTGCT AACGGGGCGA CTACACAAGT GCCTTCTGTG 1560
GCCCCTCAGA CATCATTAAA CATCAGCGGC CTCCTCGCAA ACAGGAACGT AGTCCTTGTG 1620
GGACAGCCAG TGGTCAGATG TGCAGCCTCA GGAGATAACA GAGGATTTGC ACAGGACAGA 1680
AACCTTGTGA ATGCAGTGAA TGTGGTTGTG CCTTCCGTGA TCAATTATGT CTTATTTTAT 1740
GTTACAGAAA ACCCATAG
```

Seq ID NO: 214 <u>Protein sequence</u>
Protein Accession #: FGENESH predicted

```
1          11         21         31         41         51
|          |          |          |          |          |
MMGSHVAQAG LELLGSSDPP ALASESAGIT GLLLQESITL EDVAVDFTWE EWQLLGAAQK   60
DLYRDVMLEN YSNLVAVGYQ ASKPDALFKL EQGEQLWTIE DGIHSGACSG SPKVPFSIFS  120
SVPFTLQNCL HSNIWKVDHV LERLQSESLV NRRKPCHEHD AFENIVHCSK SQFLLGQNHD  180
IFDLRGKSLK SNLTLVNQSK GYEIKNSVEP TGNGDSFLHA NHERLHTAIK FPASQKLIST  240
```

```
        KSQFISPKHQ KTRKLEKHHV CSECGKAFIK KSWLTDHQVM HTGEKPHRCS LCEKAFSRKF    300
        MLTEHQRTHT GEKPYECPEC GKAFLKKSRL NIHQKTHTGE KPYICSECGK GPIQKGNLIV    360
        HQRIHTGEKP YICNECGKGP IQKTCLIAHQ RFHTGKTPFV CSECGKSCSQ KSGLIKHQRI    420
        HTGEKPFECS ECGKAFSTKQ KLIVHQRTHT GERPYGCNEC GKAFAYMSCL VKHKRIHTRE    480
        KQEAAKVENP PAERHSSLHT SDVMQERNSA NGATTQVPSV APQTSLNISG LLANRNVVLV    540
        GQPVVRCAAS GDNRGFAQDR NLVNAVNVVV PSVINYVLFY VTENP
```

Seq ID NO: 215 DNA sequence
Nucleic Acid Accession #: NM_032190.1
Coding sequence: 502..1332

```
        1          11         21         31         41         51
        |          |          |          |          |          |
        GATTCCGTGT TCTTGGCCAT GTTAGCCATA ATATCCTGTG CAGTATGTTT TTCCTGTGCA     60
        GAGGCAAAAA CATATTGGGC ATATGTTCCC AAGCCCCCAG CAGTATGACC CATACTTTGG    120
        AGTGACACTC CTCCTAAGAT TTATCATGAT TAAGGAGCAT GGGCTCCAGG ACCCCTAACT    180
        CCACCTGACA TAGAACAGTT AGACTCTCAG AATAATGTCA TTAATTATAC CGCTCCATTG    240
        GAAGGACTTC CTTTGTGTGT CACCACAAAG ACATCACTCA GCCATAGCTG TCTTACAGTT    300
        CAAGCTCACA CATGGTTGAG TCACTATGGG AAAATCATGT ACTTATTAAG TCTTGGTTAT    360
        ATTAATGTAA CCGGTGTGCT AACCAACCAT TCCTGGCCCA ATCGCCTTCA TTGTGCTGAC    420
        TATACAGAAT GGATTCCCTT CAATAGTTCC TACCCCCCTC CATAGACCCA GTGTCTTGGC    480
        CCACTGGCTA GAAAACAATC TATGTTAACT GGAGACATTG TGGATTGGGG ACCTAAAGGC    540
        CAATTAGATG GAAAAGAAGA AAATCAGAAA TCGTGGCACA AACTTTGCTG GCATTGGTGG    600
        CAAGCTTTTA ATGCTTCTTC TTTATATAAC ACTGGGATCC AATCCCAGTC GGCCGCCCAG    660
        ATTGCTTGGC ATGGAGCAGG CTTTAGCCCG CCTCTTCCTC AGTGGCATTA TCTAGGGAGG    720
        AAAGGACCAA TTCAAAAGAT GATATGGAAG GCAGCATTCC CATTTATGAA TGGCAACATC    780
        TGGGTTGCCA TAATACTATC CAATAATAGC AATAGTAAGC AACACAGTCT TAATGTTACA    840
        TTTGTAAAGA ATATCACCAC TCAATTTACA GTTTGTGTTT TTAATCCTTA TGTGTTTTTG    900
        GCAGCTAAGA AGGACCAGCT CCAGGTAAAC AATACCCAAT TGACCTGTAA ATCTTGCCAG    960
        TTATATCACT GCATTAATCA TAGCACATTG CAAACACATA ATATCTCTAC TTTGATGATT   1020
        TTAGGTTGCA TCCCTGGGCT ATGGATTCCT GTTAATCTGT CTGAGCCATG GGCTGCCACA ·   1080
        ATTGCTTTAC ATTTTGTGAA ACTTCTTCTA ACTCAGTTTA CTCGTAGAGGC   CCGTAGAGGC   1140
        TTAGGCATGA TAATTTTTGC TATTGTTTAC TTGGTCACAC TAATAATTTC TGTTGTGATG   1200
        TCCTCTGTAG CTTTGCATAG TTCTATTCAA ACAGCTCAGT ATGTGGAGAA CTGGACACGC   1260
        ACAGTCAACC AAGGGTGGCT ACTTGAGAAT AAAATTAACA CTGAGTTACA AACTGAAGTG   1320
        GCAGTGTTAT AATCCACGAT TCTATGGTTA GGGGAACAAG TACAAAGCTT GCAATTGCAG   1380
        CAGTAATTGT GTTGTCATTT TAATCACACT CATATTTGTG TAACCAACTT AGAATATAAC   1440
        CAAAGTGAGT ATCCATGGGA TCTTGTGAAA GCCCATTTGC AGGGAGCTTT CACATCCGAC   1500
        ATCACCTTTG ATATTGGTGA ATTACAAAAC AAAATTCTTG ATTTAAATAA ACAAATTCCA   1560
        GAGTTTCAGC CTTCTTTAGA AGACTGGACT GAATTCCAGC AAGGCCTGGA GAGCGTCAAC   1620
        CCTTGGACCT ATCTAAAGCA CCACATTAAC ATCTTATATA TAGTTCTTGG AATAATGTTG   1680
        TTTTGTCTCT GTCTTCTGTT CATAGTCTGT AAAATCGGAT GGACTGCCAA TCGGAGAATG   1740
        AAAGCTACCC AGCCTGGCCT TACATTCTTT CACTTAATAC ATAAACAAGA AGGGGGGAAAT   1800
        GTTGGGAGCC AAAAAAGGCCA AAGGGATGGT GACCAACTCA GCATTCCACT GGAGGCTACA   1860
        TGATCAAACA GCAAACTGTT TATCATGAAT ACAGAATGTG GGCAAACTCG CTTCTGTGCC   1920
        TGCCCAGAAG GTTTGCTGAG GGCCATCGCT CCCTGGCCCC GGCTCCTTGA GGTTATCTAC   1980
        TGGGACATCT AGAGCCTATT GTTCGAGGAA TGCAGTCTTG CAAGCCTACT CTGGACCGAG   2040
        CAGCTGACCT CTTCTTCCAC ACCCCTTCTC ACTATCTCTT TTGCCTAATA AATATGGAGG   2100
        GCTGTGTAAA GCTCAGGGCC CTTGTCCACT AGAGGCAAGG TGTCCCCTGA CCCTTCTTCC   2160
        AAACAT
```

Seq ID NO: 216 Protein sequence
Protein Accession #: NP_115566.1

```
        1          11         21         31         41         51
        |          |          |          |          |          |
        MLTGDIVDWG PKGQLDGKEE NQKSWHKLCW HWWQAFNASS LYNTGIQSQS AAQIAWHGAG     60
        FSPPLPQWHY LGRKGPIQKM IWKAAFPFMN GNIWVAIILS NNSNSKQHSL NVTFVKNITT    120
        QFTVCVFNPY VFLAAKKDQL QVNNTQLTCK SCQLYHCINH STLQTHNIST LMILGCIPGL    180
        WIPVNLSEPW AATIALHFVK LLLTQFTHCV RRGLGMIIFA IVYLVTLIIS VVMSSVALHS    240
        SIQTAQYVEN WTRTVNQGWL LENKINTELQ TEVAVL
```

Seq ID NO: 217 DNA sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..1566

```
        1          11         21         31         41         51
        |          |          |          |          |          |
        ATGGTGAACC CCAAATCCAC TTCCTCCCTC TTCAGGTTAT GTTTTTTGCT CCTGAGGAGT     60
        CAGAACCTGT GGGTTGAAGA GCAAATTCAA TGCAAAAACA TATTGGGCAT ATGTTCCCAA    120
        TCCCCCAGCA GTATGGCCTA TACTTGGAG CTCACTCCTC CTGAGATTTA TCACGATCAG    180
        GGAGAGTGGG CTCCAGGACC CCTAACTCCC CGTGACATAG AAAAGTTAGA CTCTCAGAAC    240
        AATGTCATTA ATTATACCAC TCCACTGGAA GGACTCCCTT TGTTTATCAC CACAAAGACG    300
        TCGCTCAGCC ATAGCTGTCT TGCAATTCAA GCTCAAACAT GGTTGAGTCA CTATGGAAAA    360
        ATTATGTACT TATTAGGTCT TGGTTCTATT AATGTAACTG GTGTGCTAAC CAATCATTCC    420
        CAGTCCAGTC ACCCTAATTG TGCTGATTAT ACAGAATGGA TTCCATTCAA TAGTTCCTAC    480
        CCCACTCTGT GGACCCAGTG TCTTGATCCA CTGGCTAGTA AACAATATAT GTCAACTGAA    540
        GACACTGTGG ATTGGGAACC TAAAGGTCAA TTAGATGGAA AAGGTGAAAG TCAGAAATCA    600
        TGGCACAAAC TTCACTGGCA TTGGCGGCAA GCTTTTAATG CTTCTTCTTT ATACAACAGC    660
        AGAATCCAAT CCCAGTCTGC TGCTCAGATT GCTTGGCATG GAGCAGGCTT TAGCCCACCT    720
        CTTCCTCAGT TGCATTATCT GGGGAGGAAA GGACCAATTC AAGAAACTAT ATGGAAGGCA    780
        GCACTCCCAT TTATGAATGG CAACATCTGG ATTGGAACAC TGTCTAATAA TAGCAATAGT    840
        AAGCAACACA GTCTTAATGT TGCATTTGTA AAGAATATCA CCACTCAGTT TACAGTTTGT    900
        GTTTTTAATC CTTATGCCTT TTTGGCAGCT AAGAAGAACC AGCTTCAGGT GGAGAACTGG    960
```

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ACACGCACAG CTGACCAAGC GAGGCTACTT CAGAATAAAA TTAACACTGA GTTACAAACT 1020
GAAGTGGCAA TGTTGAAATC CATGGTTCTG TGGTTAGGAG AACAGGTACA AAGCTTGCAG 1080
TTGCAGCAGC AATTGCGTCA TCATTTTAAT CACATTCATA TTTGCGTAAC TAACTCAGAA 1140
TATAACCAAA GTGAGTATCC GTGGGACCTT GTGAAAGCCC ATTTGCAAGG AGCTTTCACA 1200
TCCAACATCA CCTTTGATAT TGGTGAATTA CAAAACAAAA TTATTGATTT AAATAGGCAA 1260
ACTCAAGAAT TTCAGCCTTC TTTAGAAGAC TGGACCGAAT TCCAGAAGG CCTGGAGAGC 1320
CTCAACCCTT GGACCTATCT AAGGCACCAC ATTAACATCT TATATGTAGT TCTTGGAATA 1380
ATGTTGTTTT GTCTCTGTCT TCGGTTTATA GTCTGTAAAA TCGGATGGAC CACCAATTGG 1440
AGAATGAGAG CCTCCCAGCC CAGCCTTACA TTCTTTCAAT TAATACATAA ACAGAAAGGG 1500
GGATATGCAG GGAGCCAAAG GCCTGTGGGA CGTGACCAAC TCAGCATTCT GCTGGAGGCT 1560
ATATGA
```

Seq ID NO: 218 Protein sequence
Protein Accession #: FGENESH predicted

```
1          11         21         31         41         51
|          |          |          |          |          |
MVNPKSTSSL FRLCPLLLRS QNLWVEEQIQ CKNILGICSQ SPSSMAYTLE LTPPEIYHDQ   60
GEWAPGPLTP RDIEKLDSQN NVINYTTPLE GLPLFITTKT SLSHSCLAIQ AQTWLSHYGK  120
IMYLLGLGSI NVTGVLTNHS QSSHPNCADY TEWIPFNSSY PTLWTQCLDP LASKQYMSTE  180
DTVDWEPKGQ LDGKGESQKS WHKLHWHWRQ AFNASSLYNS RIQSQSAAQI AWHGAGFSPP  240
LPQLHYLGRK GPIQETIWKA ALPFMNGNIW IGTLSNNSNS KQHSLNVAFV KNITTQFTVC  300
VFNPYAFLAA KKNQLQVENW TRTADQARLL QNKINTELQT EVAMLKSMVL WLGEQVQSLQ  360
LQQQLRHHFN HIHICVTNSE YNQSEYPWDL VKAHLQGAPT SNITFDIGEL QNKIIDLNRQ  420
TQEFQPSLED WTEFQEGLES LNPWTYLRHH INILYVVLGI MLFCLCLRFI VCKIGWTTNW  480
RMRASQPSLT FFQLIHKQKG GYAGSQRPVG RDQLSILLEA I
```

Seq ID NO: 219 DNA sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..900

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGCCGCCGC GGGAGCTGAG CGAGGCCGAG CCGCCCCCGC TCCGGGCCCC GACCCCTCCC   60
CCGCGGCGGC GTAGCGCGCC CCCAGAGCTG GGCATCAAGT GCGTGCTGGT GGGCGACGGC  120
GCCGTGGGCA AGAGCAGCCT CATCGTCAGC TACACCTGCA ATGGGTACCC CGCGCGCTAC  180
CGGCCCACTG CGCTGGACAC CTTCTCTGGT ACGTACGTTC AATCGCCCGT GCGGCCGCGT  240
GGCTGCGGCG GGGCTGTGCA CCGGGGAGCT GGGGCGGGCG TCTCGGCGGG AGGGCGCAGA  300
GGACCCCGGG GAGGAGACTG GAGCAGGCCC CGAGGTGGCG CTGGTGCGGC CCAGGACGCT  360
CTTCCTAACT CAGGCTCTCC CCGCCCCGCC CCTGCAGTGC AAGTCCTGGT GGATGGAGCT  420
CCGGTGCGCA TTGAGCTCTG GGACACAGCG GGACAGGAGG ATTTTGACCG ACTTCGTTCC  480
CTTTGCTACC CGGATACCGA TGTCTTCCTG GCGTGCTTCA GCGTGGTGCA GCCCAGCTCC  540
TTTCAAAACA TCACAGAGAA ATGGCTGCCC GAGATCCGCA CGCACAACCC CCAGGCGCCT  600
GTGCTGCTGG TGGGCACCCA GGCCGACCTG AGGGACGATG TCAACGTACT AATTCAGCTG  660
GACCAGGGGG GCCGGGAGGG CCCCGTGCCC CAACCCCAGG CTCAGGGTCT GGCCGAGAAG  720
ATCCGAGCCT GCTGCTACCT TGAGTGCTCA GCCTTGACGC AGAAGAACTT GAAGGAAGTA  780
TTTGACTCGG CTATTCTCAG TGCCATTGAG CACAAAGCCC GGCTGGAGAA GAAACTGAAT  840
GCCAAAGGTG TGCGCACCCT CTCCCGCTGC CGCTGGAAGA AGTTCTTCTG CTTCGTTTGA
```

Seq ID NO: 220 Protein sequence
Protein Accession #: FGENESH predicted

```
1          11         21         31         41         51
|          |          |          |          |          |
MPPRELSEAE PPPLRAPTPP PRRRSAPPEL GIKCVLVGDG AVGKSSLIVS YTCNGYPARY   60
RPTALDTFSG TYVQSPVRPR GCGGAVHRGA GAGVSAGGRR GPRGGDWSRP RGGAGAAQDA  120
LPNSGSPRPA PAVQVLVDGA PVRIELWDTA GQEDPDRLRS LCYPDTDVFL ACFSVVQPSS  180
FQNITEKWLP EIRTHNPQAP VLLVGTQADL RDDVNVLIQL DQGGREGPVP QPQAQGLAEK  240
IRACCYLECS ALTQKNLKEV FDSAILSAIE HKARLEKKLN AKGVRTLSRC RWKKFFCFV
```

Seq ID NO: 221 DNA sequence
Nucleic Acid Accession #: XM_063832.2
Coding sequence: 1..711

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGCCGCCGC GGGAGCTGAG CGAGGCCGAG CCGCCCCCGC TCCGGGCCCC GACCCCTCCC   60
CCGCGGCGGC GTAGCGCGCC CCCAGAGCTG GGCATCAAGT GCGTGCTGGT GGGCGACGGC  120
GCCGTGGGCA AGAGCAGCCT CATCGTCAGC TACACCTGCA ATGGGTACCC CGCGCGCTAC  180
CGGCCCACTG CGCTGGACAC CTTCTCTGTG CAAGTCCTGG TGGATGGAGC TCCGGTGCGC  240
ATTGAGCTCT GGGACACAGC GGGACAGGAG GATTTTGACC GACTTCGTTC CCTTTGCTAC  300
CCGGATACCG ATGTCTTCCT GGCGTGCTTC AGCGTGGTGC AGCCCAGCTC CTTTCAAAAC  360
ATCACAGAGA AATGGCTGCC CGAGATCCGC ACGCACAACC CCCAGGCGCC TGTGCTGCTG  420
GTGGGCACCC AGGCCGACCT GAGGGACGAT GTCAACGTAC TAATTCAGCT GGACCAGGGG  480
GGCCGGGAGG GCCCCGTGCC CCAACCCCAG GCTCAGGGTC TGGCCGAGAA GATCCGAGCC  540
TGCTGCTACC TTGAGTGCTC AGCCTTGACG CAGAAGAACT TGAAGGAAGT ATTTGACTCG  600
GCTATTCTCA GTGCCATTGA GCACAAAGCC CGGCTGGAGA AGAAACTGAA TGCCAAAGGT  660
GTGCGCACCC TCTCCCGCTG CCGCTGGAAG AAGTTCTTCT GCTTCGTTTG A
```

Seq ID NO: 222 Protein sequence
Protein Accession #: XP_063832.1

```
1          11         21         31         41         51
|          |          |          |          |          |
```

```
MPPRELSEAE PPPLRAPTPP PRRRSAPPEL GIKCVLVGDG AVGKSSLIVS YTCNGYPARY    60
RPTALDTFSV QVLVDGAPVR IELWDTAGQE DFDRLRSLCY PDTDVFLACF SVVQPSSFQN   120
ITEKWLPEIR THNPQAPVLL VGTQADLRDD VNVLIQLDQG GREGPVPQPQ AQGLAEKIRA   180
CCYLECSALT QKNLKEVFDS AILSAIEHKA RLEKKLNAKG VRTLSRCRWK KFFCFV
```

Seq ID NO: 223 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1161

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGAATCGGC ACCATCTGCA GGATCACTTT CTGGAAATAG ACAAGAAGAA CTGCTGTGTG    60
TTCCGAGATG ACTTCATTGC CAAGGTGTTG CCGCCGGTGT TGGGGCTGGA GTTTATCTTT   120
GGGCTTCTGG GCAATGGCCT TGCCCTGTGG ATTTTCTGTT TCCACCTCAA GTCCTGGAAA   180
TCCAGCCGGA TTTTCCTGTT CAACCTGGCA GTAGCTGACT TTCTACTGAT CATCTGCCTG   240
CCGTTCGTGA TGGACTACTA TGTGCGGCGT TCAGACTGGA AGTTTGGGGA CATCCCTTGC   300
CGGCTGGTGC TCTTCATGTT TGCCATGAAC CGCCAGGGCA GCATCATCTT CCTCACGGTG   360
GTGGCGGTAG ACAGGTATTT CCGGGTGGTC CATCCCCACC ACGCCCTGAA CAAGATCTCC   420
AATTGGACAG CAGCCATCAT CTCTTGCCTT CTGTGGGGCA TCACTGTTGG CCTAACAGTC   480
CACCTCCTGA AGAAGAAGTT GCTGATCCAG AATGGCCCTG CAAATGTGTG CATCAGCTTC   540
AGCATCTGCC ATACCTTCCG GTGGCACGGA GCTATGTTCC TCCTGGAGTT CCTCCTGCCC   600
CTGGGCATCA TCCTGTTCTG CTCAGCCAGA ATTATCTGGA GCCTGCGGCA GAGACAAATG   660
GACCGGCATG CCAAGATCAA GAGAGCCATC ACCTTCATCA TGGTGGTGGC CATCGTCTTT   720
GTCATCTGCT TCCTTCCCAG CGTGGTTGTG CGGATCCGCA TCTTCTGGCT CCTGCACACT   780
TCGGGCACGC AGAATTGTGA AGTGTACCGC TCGGTGGACC TGGCGTTCTT TATCACTCTC   840
AGCTTCACCT ACATGAACAG CATGCTGGAC CCCGTGGTGT ACTACTTCTC CAGCCCATCC   900
TTTCCCAACT TCTTCTCCAC TTTGATCAAC CGCTGCCTCC AGAGGAAGAT GACAGGTGAG   960
CCAGATAATA ACCGCAGCAC GAGCGTGAG CTCACAGGGG ACCCCAACAA AACCAGAGGC  1020
GCTCCAGAGG CGTTAATGGC CAACTCCGGT GAGCCATGGA GCCCCTCTTA TCTGGGCCCA  1080
ACCTCAAATA ACCATTCCAA GAAGGGACAT TGTCACCAAG AACCAGCATC TCTGGAGAAA  1140
CAGTTGGGAT GTTGCATCGA G
```

Seq ID NO: 224 <u>Protein sequence</u>
Protein Accession #: Eos sequence

```
1          11         21         31         41         51
|          |          |          |          |          |
MNRHHLQDHF LEIDKKNCCV FRDDFIAKVL PPVLGLEFIP GLLGNGLALW IPCFHLKSWK    60
SSRIFLFNLA VADFLLIICL PFVMDYYVRR SDWKFGDIPC RLVLFMFAMN RQGSIIFLTV   120
VAVDRYFRVV HPHHALNKIS NWTAAIISCL LWGITVGLTV HLLKKLLIQ NGPANVCISP   180
SICHTFRWHE AMFLLEFLLP LGIILFCSAR IIWSLRQRQM DRHAKIKRAI TFIMVVAIVF   240
VICFLPSVVV RIRIFWLLHT SGTQNCEVYR SVDLAFFITL SFTYMNSMLD PVVYYFSSPS   300
FPNFFSTLIN RCLQRKMTGE PDNNRSTSTG LTGDPNKTRG APEALMANSG EPWSPSYLGP   360
TSNNHSKKGH CHQEPASLEK QLGCCIE
```

Seq ID NO: 225 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1092

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGAATCGGC ACCATCTGCA GGATCACTTT CTGGAAATAG ACAAGAAGAA CTGCTGTGTG    60
TTCCGAGATG ACTTCATTGT CAAGGTGTTG CCGCCGGTGT TGGGGCTGGA GTTTATCTTC   120
GGGCTTCTGG GCAATGGCCT TGCCCTGTGG ATTTTCTGTT TCCACCTCAA GTCCTGGAAA   180
TCCAGCCGGA TTTTCCTGTT CAACCTGGCA GTGGCTGACT TTCTACTGAT CATCTGCCTG   240
CCCTTCCTGA TGGACAACTA TGTGAGGCGT TGGGACTGGA AGTTTGGGGA CATCCCTTGC   300
CGGCTGATGC TCTTCATGTT GGCTATGAAC CGCCAGGGCA GCATCATCTT CCTCACGGTG   360
GTGGCGGTAG ACAGGTATTT CCGGGTGGTC CATCCCCACC ACGCCCTGAA CAAGATCTCC   420
AATCGGACAG CAGCCATCAT CTCTTGCCTT CTGTGGGGCA TCACTATTGG CCTGACAGTC   480
CACCTCCTGA AGAAGAAGAT GCCGATCCAG AATGGCGGTG CAAATTTGTG CAGCAGCTTC   540
AGCATCTGCC ATACCTTCCA GTGGCACGAA GCCATGTTCC TCCTGGAGTT CTTCCTGCCC   600
CTGGGCATCA TCCTGTTCTG CTCAGCCAGA ATTATCTGGA GCCTGCGGCA GAGACAAATG   660
GACCGGCATG CCAAGATCAA GAGAGCCATC ACCTTCATCA TGGTGGTGGC CATCGTCTTT   720
GTCATCTGCT TCCTTCCCAG CGTGGTTGTG CGGATCCGCA TCTTCTGGCT CCTGCACACT   780
TCGGGCACGC AGAATTGTGA AGTGTACCGC TCGGTGGACC TGGCGTTCTT TATCACTCTC   840
AGCTTCACCT ACATGAACAG CATGCTGGAC CCCGTGGTGT ACTACTTCTC CAGCCCATCC   900
TTTCCCAACT TCTTCTCCAC TTTGATCAAC CGCTGCCTCC AGAGGAAGAT GACAGGTGAG   960
CCAGATAATA ACCGCAGCAC GAGCGTCGAG CTCACAGGGG ACCCCAACAA AACCAGAGGC  1020
GCTCCAGAGG CGTTAATGGC CAACTCCGGT GAGCCATGGA GCCCCTCTTA TCTGGGCCCA  1080
```

Seq ID NO: 226 <u>Protein sequence</u>
Protein Accession #: Eos sequence

```
1          11         21         31         41         51
|          |          |          |          |          |
MNRHHLQDHF LEIDKKNCCV FRDDFIVKVL PPVLGLEFIF GLLGNGLALW IPCFHLKSWK    60
SSRIFLFNLA VADFLLIICL PFLMDNYVRR WDWKFGDIPC RLMLFMLAMN RQGSIIFLTV   120
VAVDRYFRVV HPHHALNKIS NRTAAIISCL LWGITIGLTV HLLKKKMPIQ NGGANLCSSF   180
SICHTFQWHE AMFLLEFFLP LGIILFCSAR IIWSLRQRQM DRHAKIKRAI TFIMVVAIVF   240
VICFLPSVVV RIRIFWLLHT SGTQNCEVYR SVDLAFFITL SFTYMNSMLD PVVYYFSSPS   300
FPNFFSTLIN RCLQRKMTGE PDNNRSTSVE LTGDPNKTRG APEALMANSG EPWSPSYLGP   360
TSP
```

Seq ID NO: 227 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_006018
Coding sequence: 61..1224

```
1          11         21         31         41         51
|          |          |          |          |          |
CGCCACTTTG CTGGAGCATT CACTAGGCGA GGCGCTCCAT CGGACTCACT AGCCGCACTC    60
ATGAATCGGC ACCATCTGCA GGATCACTTT CTGGAAATAG ACAAGAAGAA CTGCTGTGTG   120
TTCCGAGATG ACTTCATTGC CAAGGTGTTG CCGCCGGTGT TGGGGCTGGA GTTTATCTTT   180
GGGCTTCCGG GCAATGGCCT TGCCCTGTGG ATTTTCTGTT TCCACCTGAA GTCCTGGAAA   240
TCCAGCCGGA TTTTCCTGTT CAACCTGGCA GTAGCTGACT TTCTACTGAT CATCTGCCTG   300
CCGTTCGTGA TGGACTACTA TGTGCGGCGT TCAGACTGGA ACTTTGGGGA CATCCCTTGC   360
CGGCTGGTGC TCTTCATGTT TGCCATGAAC CGCCAGGGCA GCATCATCTT CCTCACGGTG   420
GTGGCGGTAG ACAGGTATTT CCGGGTGGTC CATCCCCACC ACGCCCTGAA CAAGATCTCC   480
AATTGGACAG CAGCCATCAT CTCTTGCCTT CTGTGGGGCA TCACTGTTGG CCTAACAGTC   540
CACCTCCTGA AGAAGAAGTT GCTGATCCAG AATGCCCTG CAAATGTGTG CATCAGCTTC   600
AGCATCTGCC ATACCTTCCG GTGGCACGAA GCTATGTTCC TCCTGGAGTT CCTCCTGCCC   660
CTGGGCATCA TCCTGTTCTG CTCAGCCAGA ATTATCTGGA GCCTGCGGCA GAGACAAATG   720
GACCGGCATG CCAAGATCAA GAGAGCCATC ACCTTCATCA TGGTGGTGGC CATCGTCTTT   780
GTCATCTGCT TCCTTCCCAG CGTGGTTGTG CGGATCCGCA TCTTCTGGCT CCTGCACACT   840
TCGGGCACGC AGAATTGTGA AGTGTACCGC TCGGTGGACC TGGCGTTCTT TATCACTCTC   900
AGCTTCACCT ACATGAACAG CATGCTGGAC CCCGTGGTGT ACTACTTCTC CAGCCCATCC   960
TTTCCCAACT TCTTCTCCAC TTTGATCAAC CGCTGCCTCC AGAGGAAGAT GACAGGTGAG  1020
CCAGATAATA ACCGCAGCAC GAGCGTCGAG CTCACAGGGG ACCCCAACAA AACCAGAGGC  1080
GCTCCAGAGG CGTTAATGGC CAACTCCGGT GAGCCATGGA GCCCCTCTTA TCTGGGCCCA  1140
ACCTCAAATA ACCATTCCAA GAAGGGACAT TGTCACCAAG AACCAGCATC TCTGGAGAAA  1200
CAGTTGGGCT GTTGCATCGA GTAATGTCAC TGGACTCGGC CTAAGGTTTC CTGGAACTTC  1260
CAGATTCAGA GAATCTGATT TAGGGAAACT GTGGCAGATG AGTGGGAGAC TGGTTGCAAG  1320
GTGTGACCAC AGGAATCCTG GAGGAACAGA GAGTAAAGCT TCTAGGCATC TGAAACTTGC  1380
TTCATCTCTG ACGCTCGCAG GACTGAAGAT GGGCAAATTG TAGGCGTTTC TGCTGAGCAG  1440
AGTTGGAGCC AGAGATCTAC TTGTGACTTG TTGGCCTTCT TCCCACATCT GCCTCAGACT  1500
GGGGGGGGCT CAGCTCCTCG GGTGATATCT AGCCTGCTTG TGAGCTCTAG CAGGGATAAG  1560
GAGAGCTGAG ATTGGAGGGA ATTGTGTTGC TCCTGGAGGA AGCCCAGGCA TCATTAAACA  1620
AGCCAGTAGG TCACCTGGCT TCCGTGGACC AATTCATCTT TCAGACAAGC TTTAGAGAAA  1680
TGGACTCAGG GAAGAGACTC ACATGCTTTG GTTAGTATCT GTGTTTCCGG TGGGTGTAAT  1740
AGGGGATTAG CCCCAGAAGG GACTAGCTA AACAGTGTTA TTATGGGAAA GGAAATGGCA  1800
TTGCTGCTTT CAACCAGCGA CTAATGCAAT CCATTCCTCT CTTGTTTATA GTAATCTAAG  1860
GGTTGAGCAG TTAAAACGGC TTCAGGATAG AAAGCTGTTT CCCACCTGTT TCGTTTTACC  1920
ATTAAAAGGG AAACGTGCCT CTGCCCCACG GGTAGAGGGG GTGCACGTTC CTCCTGGTTC  1980
CTTCGCTTGT GTTTCTGTAC TTACCAAAAA TCTACCACTT CAATAAATTT TGATAGGAGA  2040
CAAAAAAAAA A
```

Seq ID NO: 228 <u>Protein sequence</u>
Protein Accession #: NP_006009.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MNRHHLQDHF LEIDKKNCCV FRDDPIAKVL PPVLGLEFIF GLLGNGLALW IFCFHLKSWK    60
SSRIFLFNLA VADFLLIICL PFVMDYYVRR SDWNFGDIPC RLVLFMFAMN RQGSIIFLTV   120
VAVDRYFRVV HPHHALNKIS NWTAAIISCL LWGITVGLTV HLLKKKLLIQ NGPANVCISF   180
SICHTFRWHE AMFLLEFLLP LGIILFCSAR IIWSLRQRQM DRHAKIKRAI TFIMVVAIVF   240
VICFLPSVVV RIRIFWLLHT SGTQNCEVYR SVDLAFFITL SFTYMNSMLD PVVYYFSSPS   300
FPNFFSTLIN RCLQRKMTGE PDNNRSTSVE LTGDPNKTRG APEALMANSG EPWSPSYLGP   360
TSNNHSKKGH CHQEPASLEK QLGCCIE
```

Seq ID NO: 229 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_014398.1
Coding sequence: 64..1314

```
1          11         21         31         41         51
|          |          |          |          |          |
GGCACGGATT CGGGGCCTGC CCGGACTTCG CCGCACGCTG CAGAACCTCG CCCAGCGCCC    60
ACCATGCCCC GGCAGCTCAG CGCGGCGGCC GCGCTCTTCG CGTCCCTGGC CGTAATTTTG   120
CACGATGGCA GTCAAATGAG AGCAAAAGCA TTTCCAGAAA CCAGAGATTA TTCTCAACCT   180
ACTGCAGCGA CAACAGTACA GGACATAAAA AAACCTGTCC AGCAACCAGC TAAGCAAGCA   240
CCTCACCAAA CTTTAGCAGC AAGATTCATG GATGGTCATA TCACCTTTCA AACAGCGGCC   300
ACAGTAAAAA TTCCAACAAC TACCCCAGCA ACTACAAAAA ACACTGCAAC CACCAGCCCA   360
ATTACCTACA CCCTGGTCAC AACCCAGGCC ACACCCAACA ACTCACACAC AGCTCCTCCA   420
GTTACTGAAG TTACAGTCGG CCCCTAGCTTA GCCCCTTATT CACTGCCACC CACCATCACC   480
CCACCAGCTC ATACAGCTGG AACCAGTTCA TCAACCGTCA GCCACACAAC TGGGAACACC   540
ACTCAACCCA GTAACCAGAC CACCCTTCCA GCAACTTTAT CGATAGCACT GCACAAAAGC   600
ACAACCGGTC AGAAGCCTGA TCAACCCACC CATGCCCCAG GAACAACGGC AGCTGCCCAC   660
AATACCACCC GCACAGCTGC ACCTGCCTCC ACGGTTCCTG GGCCCACCCT TGCACCTCAG   720
CCATCGTCAG TCAAGACTGG AATTTATCAG GTTCTAAACG GAAGCAGACT CTGTATAAAA   780
GCAGAGATGG GGATACAGCT GATTGTTCAA GACAAGGAGT CGGTTTTTTC ACCTCGGAGA   840
TACTTCAACA TCGACCCCAA CGCAACGCAA GCCTCTGGGA ACTGTGGCAC CCGAAAATCC   900
AACCTTCTGT TGAATTTTCA GGGCGGATTT GTGAATCTCA CATTTACCAA GGATGAAGAA   960
TCATATTATA TCAGTGAAGT GGGAGCCTAT TTGACCGTCT CAGATCCAGA GACAGTTTAC  1020
CAAGGAATCA AACATGCGGT GGTGATGTTC CAGACAGCAG TCGGGCATTC CTTCAAGTGC  1080
GTGAGTGAAC AGAGCCTCCA GTTGTCAGCC CACCTGCAGG TGAAAACAAC CGATGTCCAA  1140
CTTCAAGCCT TTGATTTTGA AGATGACCAC TTTGGAAATG TGGATGAGTG CTCGTCTGAC  1200
TACACAATTG TGCTTCCTGT GATTGGGGCC ATCGTGGTTG GTCTCTGCCT TATGGGTATG  1260
GGTGTCTATA AAATCCGCCT AAGGTGTCAA TCATCTGGAT ACCAGAGAAT CTAATTGTTG  1320
CCCGGGGGGA ATGAAAATAA TGGAATTTAG AGAACTCTTT CATCCCTTCC AGGATGGGATG  1380
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TTGGGAAATT CCCTCAGAGT GTGGGTCCTT CAAACAATGT AAACCACCAT CTTCTATTCA  1440
AATGAAGTGA GTCATGTGTG ATTTAAGTTC AGGCAGCACA TCAATTTCTA AATACTTTTT  1500
GTTTATTTTA TGAAAGATAT AGTGAGCTGT TTATTTTCTA GTTTCCTTTA GAATATTTTA  1560
GCCACTCAAA GTCAACATTT GAGATATGTT GAATTAACAT AATATATGTA AAGTAGAATA  1620
AGCCTTCAAA TTATAAACCA AGGGTCAATT GTAACTAATA CTACTGTGTG TGCATTGAAG  1680
ATTTTATTTT ACCCTTGATC TTAACAAAGC CTTTGCTTTG TTATCAAATG GACTTTCAGT  1740
GCTTTTACTA TCTGTGTTTT ATGGTTTCAT GTAACATACA TATTCCTGGT GTAGCACTTA  1800
ACTCCTTTTC CACTTTAAAT TTGTTTTTGT TTTTTGAGAC GGAGTTTCAC TCTTGTCACC  1860
CAGGCTGGAG TACAGTGGCA CGATCTCGGC TTATGGCAAC CTCCGCCTCC CGGGTTCAAG  1920
TGATTCTCCT GCTTCAGCTT CCCGAGTAGC TGGGATTACA GGCACACACT ACCACGCCTG  1980
GCTAATTTTT GTATTTTTAT TATAGACGGG TTTCACCATG TTGGCCAGAC TGGTCTTGAA  2040
CTCTTGACCT CAGGTGATCC ACCCACCTCA GCCTCCCAAA GTGCTGGGAT TACAGGCATG  2100
AGCCATTGCG CCCGGCCTTA AATGTTTTTT TTAATCATCA AAAAGAACAA CATATCTCAG  2160
GTTGTCTAAG TGTTTTTATG TAAAACCAAC AAAAAGAACA AATCAGCTTA TATTTTTTAT  2220
CTTGATGACT CCTGCTCCAG AATTGCTAGA CTAAGAATTA GGTGGCTACA GATGGTAGAA  2280
CTAAACAATA AGCAAGAGAC AATAATAATG GCCCTTAATT ATTAACAAAG TGCCAGAGTC  2340
TAGGCTAAGC ACTTTATCTA TATCTCATTT CATTCTCACA ACTTATAAGT GAATGAGTAA  2400
ACTGAGACTT AAGGGAACTG AATCACTTAA ATGTCACCTG GCTAACTGAT GGCAGAGCCA  2460
GAGCTTGAAT TCATGTTGGT CTGACATCAA GGTCTTTGGT CTTCTCCCTA CACCAAGTTA  2520
CCTACAAGAA CAATGACACC ACACTCTGCC TGAAGGCTCA CACCTCATAC CAGCATACGC  2580
TCACCTTACA GGGAAATGGG TTTATCCAGG ATCATGAGAC ATTAGGGTAG ATGAAAGGAG  2640
AGCTTTGCAG ATAACAAAAT AGCCTATCCT TAATAAATCC TCCACTCTCT GGAAGGAGAC  2700
TGAGGGGCTT TGTAAAACAT TAGTCAGTTG CTCATTTTTA TGGGATTGCT TAGCTGGGCT  2760
GTAAAGATGA AGGCATCAAA TAAACTCAAA GTATTTTTAA ATTTTTTTGA TAATAGAGAA  2820
ACTTCGCTAA CCAACTGTTC TTTCTTGAGT GTATAGCCCC ATCTTGTGGT AACTTGCTGC  2880
TTCTGCACTT CATATCCATA TTTCCTATTG TTCACTTTAT TCTGTAGAGC AGCCTGCCAA  2940
GAATTTTATT TCTGCTGTTT TTTTTGCTGC TAAAGAAAGG AACTAAGTCA GGATGTTAAC  3000
AGAAAAGTCC ACATAACCCT AGAATTCTTA GTCAAGGAAT AATTCAAGTC AGCCTAGAGA  3060
CCATGTTGAC TTTCCTCATG TGTTTCCTTA TGACTCAGTA AGTTGGCAAG GTCCTGACTT  3120
TAGTCTTAAT AAAACATTGA ATTGTAGTAA AGGTTTTTGC AATAAAAACT TACTTTGG
```

Seq ID NO: 230 Protein sequence
Protein Accession #:   NP_055213.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MPRQLSAAAA LFASLAVILH DGSQMRAKAF PETRDYSQPT AAATVQDIKK PVQQPAKQAP   60
HQTLAARFMD GHITFQTAAT VKIPTTTPAT TKNTATTSPI TYTLVTTQAT PNNSHTAPPV  120
TEVTVGPSLA PYSLPPTITP PAHTAGTSSS TVSHTTGNTT QPSNQTTLPA TLSIALHKST  180
TGQKPDQPTH APGTTAAAHN TTRTAAPAST VPGPTLAPQP SSVKTGIYQV LNGSRLCIKA  240
EMGIQLIVQD KESVFSPRRY PNIDPNATQA SGNCGTRKSN LLLNFQGGFV NLTFTKDEES  300
YYISBVGAYL TVSDPETVYQ GIKHAVVMFQ TAVGHSPKCV SEQSLQLSAH LQVKTTDVQL  360
QAFDPEDDHF GNVDECSSDY TIVLPVIGAI VVGLCLMGMG VYKIRLRCQS SGYQRI
```

Seq ID NO: 231 DNA sequence
Nucleic Acid Accession #: NM_005409.3
Coding sequence: 94..378

```
1          11         21         31         41         51
|          |          |          |          |          |
TTCCTTTCAT GTTCAGCATT TCTACTCCTT CCAAGAAGAG CAGCAAAGCT GAAGTAGCAG   60
CAACAGCACC AGCAGCAACA GCAAAAAACA AACATGAGTG TGAAGGGCAT GGCTATAGCC  120
TTGGCTGTGA TATTGTGTGC TACAGTTGTT CAAGGCTTCC CCATGTTCAA AAGAGGACGC  180
TGTCTTTGCA TAGGCCCTGG GGTAAAAGCA GTGAAAGTGG CAGATATTGA GAAAGCCTCC  240
ATAATGTACC CAAGTAACAA CTGTGACAAA ATAGAAGTGA TTATTACCCT GAAAGAAAAT  300
AAAGGACAAC GATGCCTAAA TCCCAAATCG AAGCAAGCAA GGCTTATAAT CAAAAAAGTT  360
GAAAGAAAGA ATTTTTAAAA ATATCAAAAC ATATGAAGTC CTGGAAAAGG GCATCTGAAA  420
AACCTAGAAC AAGTTTAACT GTGACTACTG AAATGACAAG AATTCTACAG TAGGAAACTG  480
AGACTTTTCT ATGGTTTTGT GACTTTCAAC TTTTGTACAG TTATGTGAAG GATGAAAGGT  540
GGGTGAAAGG ACCAAAAACA GAAATACAGT CTTCCTGAAT GAATGACAAT CAGAATTCCA  600
CTGCCCAAAG GAGTCCAGCA ATTAAATGGA TTTCTAGGAA AGCTACCTT AAGAAAGGCT  660
GGTTACCATC GGAGTTTACA AAGTGCTTTC ACGTTCTTAC TTGTTGTATT ATACATTCAT  720
GCATTTCTAG GCTAGAGAAC CTTCTAGATT TGATGCTTAC AACTATTCTG TTGTGACTAT  780
GAGACACATT CTGTCTCTAG AAGTTATCTG TCTGTATTGA TCTTTATGCT ATATTACTAT  840
CTGTGGTTAC AGTGGAGACA TTGACATTAT TACTGGAGTC AAGCCCTTAT AAGTCAAAAG  900
CATCTATGTG TCGTAAAGCA TTCCTCAAAC ATTTTTTCAT GCAAATACAC ACTTCTTTCC  960
CCAAATATCA TGTAGCACAT CAATATGTAG GGAAACATTC TTATGCATCA TTTGGTTTGT 1020
TTTATAACCA ATTCATTAAA TGTAATTCAT AAAATGTACT ATGAAAAAAA TTATACGCTA 1080
TGGGATACTG GCAACAGTGC ACATATTTCA TAACCAAATT AGCAGCACCG GTCTTAATTT 1140
GATGTTTTTC AACTTTTATT CATTGAGATG TTTTGAAGCA ATTAGGGATAT GTGTGTTTAC 1200
TGTACTTTTT GTTTTGTCATCC GTTTGTATAA ATGATAGCAA ACATTTGAAA CACATTTGAAA 1260
TACAAAATGT TTTTGTCTAC CAAAGAAAAA TGTTGAAAAA TAAGCAAATG TATACCTAGC 1320
AATCACTTTT ACTTTTTGTA ATTCTGTCTC TTAGAAAAAT ACATAATCTA ATCAATTTCT 1380
TTGTTCATGC CTATATACTG TAAAATTTAG GTATACTCAA GACTAGTTTA AAGAATCAAA 1440
GTCATTTTTT TCTCTAATAA ACTACCACAA CCTTTCTTTT TTAAAAAAAA AAA
```

Seq ID NO: 232 Protein sequence
Protein Accession #: NP_005400.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MSVKGMAIAL AVILCATVVQ GFPMFKRGRC LCIGPGVKAV KVADIEKASI MYPSNNCDKI   60
EVIITLKENK GQRCLNPKSK QARLIIKKVE RKNF
```

Seq ID NO: 233 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_000577.1
Coding sequence: 41..520

```
1          11         21         31         41         51
|          |          |          |          |          |
GGCACGAGGG GAAGACCTCC TGTCCTATCA GGCCCTCCCC ATGGCTTTAG AGACGATCTG     60
CCGACCCTCT GGGAGAAAAT CCAGCAAGAT GCAAGCCTTC AGAATCTGGG ATGTTAACCA    120
GAAGACCTTC TATCTGAGGA ACAACCAACT AGTTGCCGGA TACTTGCAAG GACCAAATGT    180
CAATTTAGAA GAAAAGATAG ATGTGGTACC CATTGAGCCT CATGCTCTGT TCTTGGGAAT    240
CCATGGAGGG AAGATGTGCC TGTCCTGTGT CAAGTCTGGT GATGAGACCA GACTCCAGCT    300
GGAGGCAGTT AACATCACTG ACCTGAGCGA GAACAGAAAG CAGGACAAGC GCTTCGCCTT    360
CATCCGCTCA GACAGTGGCC CCACCACCAG TTTTGAGTCT GCCGCCTGCC CCGGTTGGTT    420
CCTCTGCACA GCGATGGAAG CTGACCAGCC CGTCAGCCTC ACCAATATGC CTGACGAAGG    480
CGTCATGGTC ACCAAATTCT ACTTCCAGGA GGACGAGTAG TACTGCCCAG GCCTGCCTGT    540
TCCCATTCTT GCATGGCAAG GACTGCAGGG ACTGCCAGTC CCCCTGCCCC AGGGCTCCCG    600
GCTATGGGGG CACTGAGGAC CAGCCATTGA GGGGTGGACC CTCAGAAGGC GTCACAACAA    660
CCTGGTCACA GGACTCTGCC TCCTCTTCAA CTGACCAGCC TCCATGCTGC CTCCAGAATG    720
GTCTTTCTAA TGTGTGAATC AGAGCACAGC AGCCCCTGCA CAAAGCCCTT CCATGTCGCC    780
TCTGCATTCA GGATCAAACC CCGACCACCT GCCCAACCTG CTCTCCTCTT GCCACTGCCT    840
CTTCCTCCCT CATTCCACCT TCCCATGCCC TGGATCCATC AGGCCACTTG ATGACCCCCA    900
ACCAAGTGGC TCCCACACCC TGTTTTACAA AAAAGAAAAG ACCAGTCCAT GAGGGAGGTT    960
TTTAAGGGTT TGTGGAAAAT GAAAATTAGG ATTTCATGAT TTTTTTTTTT CAGTCCCCGT   1020
GAAGGAGAGC CCTTCATTTG GAGATTATGT TCTTTCGGGG AGAGGCTGAG GACTTCAAAT   1080
ATTCCTGCAT TTGTGAAATG ATGGTGAAAG TAAGTGGTAG CTTTTCCCTT CTTTTTCTTC   1140
TTTTTTTGTG ATGTCCCAAC TTGTAAAAAT TAAAAGTTAT GGTACTATGT TAGCCCCATA   1200
ATTTTTTTTT TCCTTTTAAA ACACTTCCAT AATCTGGACT CCTCTGTCCA GGCACTGCTG   1260
CCCAGCCTCC AAGCTCCATC TCCACTCCAG ATTTTTTTACA GCTGCCTGCA GTACTTTACC   1320
TCCTATCAGA AGTTTCTCAG CTCCCAAGGC TCTGAGCAAA TGTGGCTCCT GGGGGTTCTT   1380
TCTTCCTCTG CTGAAGGAAT AAATTGCTCC TTGACATTGT AGAGCTTCTG GCACTTGGAG   1440
ACTTGTATGA AAGATGGCTG TGCCTCTGCC TGTCTCCCCC ACCAGGCTGG GAGCTCTGCA   1500
GAGCAGGAAA CATGACTCGT ATATGTCTCA GGTCCCTGCA GGGCCAAGCA CCTAGCCTCG   1560
CTCTTGGCAG GTACTCAGCG AATGAATGCT GTATATGTTG GGTGCAAAGT TCCCTACTTC   1620
CTGTGACTTC AGCTCTGTTT TACAATAAAA TCTTGAAAAT GCCTAAAAAA AAAAAAAAAA   1680
AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAA
```

Seq ID NO: 234 <u>Protein sequence</u>
Protein Accession #: NP_000568.1

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1          11         21         31         41         51
|          |          |          |          |          |
MALETICRPS GRKSSKMQAF RIWDVNQKTF YLRNNQLVAG YLQGPNVNLE EKIDVVPIEP     60
HALFLGIHGG KMCLSCVKSG DETRLQLEAV NITDLSENRK QDKRFAFIRS DSGPTTSFES    120
AACPGWFLCT AMEADQPVSL TNMPDEGVMV TKFYFQEDE
```

Seq ID NO: 235 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001840.1
Coding sequence: 149..1567

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1          11         21         31         41         51
|          |          |          |          |          |
GGGGACTACG GAGAGCTCTG CAGGGAGCCG AGGCCCCCGC CCGGGCCAAG GGAGCTTCTG     60
TCCCGAGGAC CAGGGGATGC GAAGGGATTG CCCCCTGTGG GTCACTTTCT CAGTCATTTT    120
GAGCTCAGCC TAATCAAAGA CTGAGGTTAT GAAGTCGATC CTAGATGGCC TTGCAGATAC    180
CACCTTCCGC ACCATCACCA CTGACCTCCT GTACGTGGGC TCAAATGACA TTCAGTACGA    240
AGACATCAAA GGTGACATGG CATCCAAATT AGGGTACTTC CCACAGAAAT TCCCTTTAAC    300
TTCCTTTAGG GGAAGTCCCT TCCAAGAGAA GATGATGCG GGAGACAACC CCCAGCTAGT    360
CCCAGCAGAC GGGTGAACA TTACAGAATT TTACAACAAG TCTCTCTCGT CCTTCAAGGA    420
GAATGAGGAG AACATCCAGT GTGGGGAGAA CTTCATGGAC ATAGAGTGTT TCATGGTCCT    480
GAACCCCAGC CAGCAGCTGG CCATTGCAGT CCTGTCCCTC ACGCTGGGCA CCTTCACGGT    540
CCTGGAGAAC CTCCTGGTGC TGTGCGTCAT CCTCCACTCC GCAGCCTCC GCTGCAGGCC    600
TTCCTACCAC TTCATCGGCA GCCTGGCGGT GGCAGACCTC CTGGGGAGTG TCATTTTTGT    660
CTACAGCTTC ATTGACTTCC ACGTGTTCCA CCGCAAAGAT AGCCGCAACG TGTTTCTGTT    720
CAAACTGGGT GGGGTCACGG CCTCCTTCAC TGCCTCCGTG GGCAGCCTGT TCCTCACAGC    780
CATCGACAGG TACATATCCA TTCACAGGCC CCTGGCCTAT AAGAGGATTG TCACCAGGCC    840
CAAGGCCGTG GTGGCGTTTT GCCTGATGTG GACCATAGCC ATTGTGATCG CCGTGCTGCC    900
TCTCCTGGGC TGGAACTGCG AGAAACTGCA ATCTGTTTGC TCAGACATTT TCCCACACAT    960
TGATGAAACC TACCTGATGT TCTGGATCGG GGTCACCAGC GTACTGCTTC TGTTCATCGT   1020
GTATGCGTAC ATGTATATTC TCTGGAAGGC TCACAGCCAC GCCGTCCGCA TGATTCAGCG   1080
TGGCACCCAG AAGAGCATCA TCATCCACAC GTCTGAGGAT GGGAAGGTAC AGGTGACCCG   1140
GCCAGACCAA GCCCGCATGG ACATTAGGTT AGCCAAGACC CTGGTCCTGA TCCTGGTGGT   1200
GTTGATCATC TGCTGGGGGC CTCTGCTTGC AATCATGGTG TATGATGTCT TTGGGAAGAT   1260
GAACAAGCTC ATTAAGACGG TGTTTGCATT CTGCAGTATG CTCTGCCTGC TGAACTCCAC   1320
CGTGAACCCC ATCATCTATG CTCTGAGGAG TAAGGACCTG CGACACGCTT TCCGGAGCAT   1380
GTTTCCCTCT TGTGAAGGCA CTGCGCAGCC TCTGGATAAC AGCATGGGGG ACTCGGACTG   1440
CCTGCACAAA CACGCAAACA ATGCAGCCAG TGTTCACAGG GCCGCAGAAA GCTGCATCAA   1500
GAGCACGGTC AAGATTGCCA AGGTAACCAT GTCTGTGTCC ACAGACACGT CTGCCGAGGC   1560
TCTGTGAGCC TGATGCCTCC CTGGCAGCAC AGGAAAAGAA TTTTTTTTTT TAAGCTCAAA   1620
ATCTAGAAGA GTCTATTGTC TCCTTGGTTA TATTTTTTTA ACTTTACCAT GCTCAATGAA   1680
AAGGTGATTG CCACATGTCA CTTATTTGCT TAGTTTCCGT TTGGGCTAAT CTTCCGGGGT   1740
TCGTAGGAAA CCTTT
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Seq ID NO: 236 <u>Protein sequence</u>
Protein Accession #: NP_001831.1

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         1          11         21         31         41         51
         |          |          |          |          |          |
 5       MKSILDGLAD TTFRTITTDL LYVGSNDIQY EDIKGDMASK LGYFPQKFPL TSFRGSPFQE   60
         KMTAGDNPQL VPADQVNITE FYNKSLSSFK ENEENIQCGE NFMDIECFMV LNPSQQLAIA   120
         VLSLTLGTFT VLENLLVLCV ILHSRSLRCR PSYHFIGSLA VADLLGSVIF VYSFIDFHVF   180
         HRKDSRNVFL FKLGGVTASF TASVGSLFLT AIDRYISIHR PLAYKRIVTR PKAVVAFCLM   240
         WTIAIVIAVL PLLGWNCEKL QSVCSDIFPH IDETYLMFWI GVTSVLLLFI VYAYMYILWK   300
 10      AHSHAVRMIQ RGTQKSIIIH TSEDGKVQVT RPDQARMDIR LAKTLVLILV VLIICWGPLL   360
         AIMVYDVFGK MNKLIKTVFA FCSMLCLLNS TVNPIIYALR SKDLRHAFRS MFPSCEGTAQ   420
         PLDNSMGDSD CLHKHANNAA SVHRAAESCI KSTVKIAKVT MSVSTDTSAE AL
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Seq ID NO: 237 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_016083.2
Coding sequence: 64..1482

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         1          11         21         31         41         51
         |          |          |          |          |          |
 20      GATTGCCCCC TGTGGGTCAC TTTCTCAGTC ATTTTGAGCT CAGCCTAATC AAAGACTGAG   60
         GTTATGAAGT CGATCCTAGA TGGCCTTGCA GATACCACCT TCCGCACCAT CACCACTGAC   120
         CTCCTGTACG TGGGCTCAAA TGACATTCAG TACGAAGACA TCAAAGGTGA CATGGCATCC   180
         AAATTAGGGT ACTTCCCACA GAAATTCCCT TTAACTTCCT TTAGGGGAAG TCCCTTCCAA   240
         GAGAAGATGA CTGCGGGAGA CAACCCCCAG CTAGTCCCAG CAGACCAGGT GAACATTACA   300
 25      GAATTTTACA ACAAGTCTCT CTCGTCCTTC AAGGAGAATG AGGAGAACAT CCAGTGTGGG   360
         GAGAACTTCA TGGACATAGA GTGTTTCATG GTCCTGAACC CCAGCCAGCA GCTGGCCATT   420
         GCAGTCCTGT CCCTCACGCT GGGCACCTTC ACGGTCCTGG AGAACCTCCT GGTGCTGTGC   480
         GTCATCCTCC ACTCCCGCAG CCTCCGCTGC AGGCCTTCCT ACCACTTCAT CGGCAGCCTG   540
         GCGGTGGCAG ACCTCCTGGG GAGTGTCATT TTTGTCTACA GCTTCATTGA CTTCCACGTG   600
 30      TTCCACCGCA AAGATAGCCG CAACGTGTTT CTGTTCAAAC TGGGTGGGGT CACGGCCTCC   660
         CTCACTGCCT CCGTGGGCAG CCTGTTCCTC ACAGCCATCG ACAGGTACGT ATCCATTCAC   720
         AGGCCCCTGG CCTATAAGAG GATTGTCACC AGGCCCAAGG CCGTGGTGGC GTTTTGCCTG   780
         ATGTGGACCA TAGCCATTGC GATCGCCGTG CTGCCTCTCC TGGGCTGGAA CTGCGAGAAA   840
         CTGCAATCTG TTTGCTCAGA CATTTTCCCA CACATTGATG AAACCTACCT GATGTTCTGG   900
 35      ATCGGGGTCA CCAGCGTACT GCTTCTGTTC ATCGTGTATG CGTACATGTA TATTCTCTGG   960
         AAGGCTCACA GCCACGCCGT CCGCATGATT CAGCGTGGCA CCCAGAAGAG CATCATCATC   1020
         CACACGTCTG AGGATGGGAA GGTACAGGTG ACCCGGCCAG ACCAAGCCCG CATGGACATT   1080
         AGGTTAGCCA AGACCCTGGT CCTGATCCTG GTGGTGTTGA TCATCTGCTG GGGCCCTTTG   1140
         CTTGCAATCA TGGTGTATGA TGTCTTTGGG AAGATGAACA AGCTCATTAA GACGGTGTTT   1200
 40      GCATTCTGCA GTATGCTCTG CCTGCTGAAC TCCACCGTGA ACCCCATCAT CTATGCTCTG   1260
         AGGAGTAAGG ACCTGCGACA CGCTTTCCGG AGCATGTTTC CCTCTTGTGA AGGCACTGCG   1320
         CAGCCTCTGG ATAACAGCAT GGGGGACTCG GACTGCCTGC ACAAACACGC AAACAATGCA   1380
         GCCAGTGTTC ACAGGGCCGC AGAAAGCTGC ATCAAGAGCA CGGTCAAGAT TGCCAAGGTA   1440
         ACCATGTCTG TGTCCACAGA CACGTCTGCC GAGGCTCTGT GAGCCTGATG CCTCCCTGGC   1500
 45      AGCACAGGAA AAGAATTTTT TTTTTAAGC TCAAAATCTA GAAGAGTCTA TTGTCTCCTT   1560
         GGTTATATTT TTTTAACTTT ACCATGCTCA ATGAAAAGGT GATTGTCACC ATGATCACTT   1620
         ATCAGTTTGC TAATGTTTCC ATAGTTTAGG TACTCAAACT CCATTCTCCA GGGGTTTACA   1680
         GTGAAGAAAG CCTGTTGTTT AAGTGACTGA ACGATCCTTC AAAGTCTCAA TGAAATAGGA   1740
         GGGAAACCTT TGGCTACACA ATTGGAAGTC TAAGAACCCA TGGAAAAATG CCATCAAATG   1800
 50      AATAATGCCT TTGTAACCAC AACTTTCACT ATAATGTGAA ATGTAACTGT CCGTAGTATC   1860
         AGAGATGTCC ATTTTTACAA GTTATAGTAC TAGAGATATT TTGTAAAATG TATTATGTCC   1920
         TGTGAGTGT GTATCAGTGT TTATGTGCTA TTAATATTTG TTAGTTCAG CAAAACTGAA   1980
         AGGTAGACTT TTATGAGAAC AATGGACAAG CAGTGGATAC GTGTCAATGT GTGCACTTTT   2040
         TTTCTATATT ATTGCCCATG ATATAACTTT AGAAATAAAC CTTAATATTT CTTCAAATAT   2100
 55      CTCTATTTAA TTTTGACACT GAAATAACCG TAAAGGTTTA TGGTTTTCTGTT ACCTCAACAA   2160
         GAAGAATTTG AAGACTTCAA AATATTGAGC AGAATTCATT CATACTTAAA AATTTATTAG   2220
         CCCTGCATTT TCATAGGAAG ACACATTATC TTCTGGACTA TAGCTGTTCT AATGGATTAT   2280
         AATCAGAATG GAAGAGAGAA AGCATATTGA CTTTTTTTGA GCGACATCTC TGACTTTCTT   2340
         TAGTCTTTAG CTATTACTGG ATCTCTTAAG ACAGCATGTG TTAATCTTAA TGTATATCGT   2400
 60      TATCACTGTG CAGTTGCTGT TTACTTGAAT AGTATTGTGT TCCTATATTC CAGGTTTAAG   2460
         TAGATTTCAT GCCTGGGTGG CCAAACAACA GTCTTCATTT TTTTTAATTG AAAAGAAGTA   2520
         GTGTCTGGAT CAGTAAAATT ATACTGTGTG TGAGTGTGAA TATAAATGTG TGTATGTGTG   2580
         TTTCTGTCCG TAACTGTTAC AGTAATGTCA TAAAGTGAGA AAACTGTGAC CAAGTATAAA   2640
         CTTTTTACCAC TTGCTGCACT CTTGCACATG GATTCAGTTT CTAAAATTGA GTTCTTCCTG   2700
 65      TAATCTTGTT GATAAAAATA CTGACTCCAA CCATTCAAAA ATTTCACCCC ATCCCTCCTT   2760
         AAGAGATTGG ATCAAGTATT ACTAAATTGA CCTTTAGGTA TTACACAAGA CCAGTGCTTA   2820
         GCAAAAAATA ATGACAGGCA TCCAAGGAAG GGATGTATTT GTAGTGTTAT TGCCAGGAAA   2880
         GGAGAGTACT TTGGTTTCTG AGCACCGAAT ATTGAGCAAT ATGTCAGTCA CTAAAAGGAA   2940
         GACAGTTCTA CAGAAAAACA AATGGTAACA TTTTTCAATA GCGTGTGTAG ATAGTATGCA   3000
 70      CTATATACAT CACGTTAAAG TAGGACTATC ACACCCAGCC CATGTGGCTA AAAAAGCTGA   3060
         ATCAGACAGT GGATGAGACA CACAACGGCA GTGAAGAACC GATACACTTG GCATTGACGT   3120
         CTAGCTATGC TGTATCTGTG CTTTGCCCAC ATGCCCTTGG TGACAGCTGA GCACCCAGCT   3180
         CTGTCTTGGT AGGTTTGGGC TAAGGAACAA ATCTCTCCTT TGCTCGTGGT TAGCCAAGATA   3240
         CACTCAAGCA TGAAGATAAA CACAGCTGCT TTCTTCTTAC ACCCCGGTCT CATGCTCCTT   3300
 75      AATGGCGCCA TGGGTGCTTG TTGGGCCTTT TTCCAGTAAG GAATGATATT GCTGAAGAAT   3360
         CTACTTAACC CTGACAAATT TTAATTATAA TCTCTTCTTA TACAGATAAA ACATGACTCC   3420
         TACAAGGCCC CAAGGTTTAC ATAGTCTGAA GTGAAGTACA GAGCTGGCAT CTATCTGGTG   3480
         ATTTCTAGCT CTCGAGATAC CCAAGCAGCC TGATGGGGCA GTTCCCCTTC TTACGGTTCA   3540
         CGCTCTAAGG CAGGATGTGG CTTATGAGAT ACTTTGCATT GTCTGTCTGC ACACCTTGAA   3600
 80      TCTGCCTGCT GGCTCCCTTA CTTTACCTCT CTGTCATGTG CAGATGAAGG CTCAGGGTGC   3660
         TAGAGGATTA GTAAGATCTC TTTCTAAAGA CAGGAGGACC TATTTACAAG AAGAACTCAC   3720
         CAGGGTTTAG TTTGCATTTA AGAATTGCCA GTCTTTTGTC CTGCATCATC TTGAACATTA   3780
         ATCCACATGT TTCAGAGCTC ACCAGGCAGT ACCAATGCTC TTTTCACAGC TATGAAGAGC   3840
         TAGAGAAATT CTTGTTATGG TAGAAAAATT TCACGGTTCA TTTTTGAAAC TGCATTTGTG   3900
         CGTATGCAGT GTAGATTTTA TAGTGTGTTG TGCTTTCAAG ATCTAAATCA TATATAATAA   3960
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ATTAAGGGAC AATGGGGCTG ACAGCACTAA ACTTGGTGCT TATTGATATT CTAAGAAATA 4020
TCTGTGAAAT ATCATCACGT ATGTTATACA ACCTTCATTT AAAAAGGTTT AAAACTAGTT 4080
AGATTCACTT TGACACTTTT CATATCATTT CTTAACCCAA GTGACGAAAA CATTGTCCCC 4140
AATGAATATA CTCATTAGAA TTACCATTTG TTAATATCAC TCATTAATTA ACCCCATAAT 4200
TAGATCCATT AATTTAAATG ATTTAAATTT AAGTAAGTTT TATAAGGTCT GACATCAGAG 4260
GTATCTTACT TTCCTCTGAG GATGATGTAC TTGCCCTGAC CATGCATTTT ACCATCACAC 4320
ATGTTCAGAA AGGGCCAAAT TCCCAACCTG CTCATTTTTT TTTTTATCAG AGTCATGATG 4380
AATCAGTCCT AGAATGTTTC ATTTGCACAA GTAGGGCTGC CTCCAAGAGG AACCTCTGAT 4440
TTATTTTGTA TGAAATATAT GTGAAAGGAT ATGAATCTGA GAGATGCTGT AGACATCTGT 4500
CCTACACTTG AGATGATTTC CAAGCCTCTC TGGCACTTTG AGTTAAGTCT ATCTGGTATT 4560
AAATGCCAAG GACCTTTTGC TGCCTAAATC CACTCTGCAG GAAATAGGCC CAACCACCAG 4620
ATGAGAATTA GGCCCTGGAT GAGTAGCGCT ATAGTTACTG TCCTGTTGAT TAATTTCTGC 4680
CATTTCATGT CCATAAAAGA GACCACCCAT ATCATGCACA CAATTAGATT TCTCACACTC 4740
TAACTGTATA TTTGTATGAT ATTTTAAAAT CTCCTAAATG CTGGGCAATG GCTATTAACA 4800
ATTAATTGTC TTGCACTGGC CTTCTGATGA AATGTTAACA ATGCCTATTG TAATATAGAA 4860
AAAAACATTC TATCTACTGA TTTGGGCTAA ATGTATGTAA ATAGGTTTCT AAAAAGTCAG 4920
ATGTTTGAGC AGTGGCCTAC AAATCAGTAA TTTTCGGGTG GGAGAGTTTC TTTACATTGC 4980
CGTGGCATCT TAAAAGCTAT CTTCATGTAA ATTGACTGTA CTAGGCCTAC TGGGGATCAG 5040
AGTTCCCAAG AAAGGAAACC TTTTCTTGTA TCTGGATTCA AATTTATTTC CAATGTTTCA 5100
AGCGGGAAAC ATGACTCTTT ATTGTCTGTA AATCTAACAT TATTACTTTT CCTCTTAGAA 5160
GAATATTGTA TTGTTAGATG TTTGTTGAGC TGGTAACATC GTTGCAACCA CTGCAATATC 5220
TTCGTTAGTA ATCTGTATAA TACTTTGTAT ACAAGTACTG GTAAGATTGT TATTAAATGT 5280
AGCTTCAGTC ATTAAATTAC TATAGCAAAG TAGTACTTCT TCTGTAATAT TTACAATGTA 5340
TTAAGCCCAC AGTATATTTT ATTTCAATGT AATTAAACTG TTAACTTATT CAAAGAGAAA 5400
ACATCTCATC ATGTCTATTG TCCAAAGTTA CCTGGAATCA AATAAAAATT CTAGATTACC 5460
ATGAAGAACA TA
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Seq ID NO: 238 Protein sequence
Protein Accession #: NP_057167.1

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1          11         21         31         41         51
|          |          |          |          |          |
MKSILDGLAD TTFRTITTDL LYVGSNDIQY EDIKGDMASK LGYFPQKFPL TSFRGSPFQE  60
KMTAGDNPQL VPADQVNITE FYNKSLSSFK ENEENIQCGE NPMDIECFMV LNPSQQLAIA 120
VLSLTLGTFT VLENLLVLCV ILHSRSLRCR PSYHFIGSLA VADLLGSVIF VYSFIDFHVF 180
HRKDSRNVFL FKLGGVTASL TASVGSLFLT AIDRYVSIHR PLAYKRIVTR PKAVVAFCLM 240
WTIAIAIAVL PLLGWNCEKL QSVCSDIFPH IDETYLMFWI GVTSVLLLFI VYAYMYILWK 300
AHSHAVRMIQ RGTQKSIIIH TSEDGKVQVT RPDQARMDIR LAKTLVLILV VLIICWGPLL 360
AIMVYDVFGK MNKLIKTVFA FCSMLCLLNS TVNPIIYALR SKDLRHAFRS MFPSCEGTAQ 420
PLDNSMGDSD CLHKHANNAA SVHRAAESCI KSTVKIAKVT MSVSTDTSAE AL
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Seq ID NO: 239 DNA sequence
Nucleic Acid Accession #: NM_033181.1
Coding sequence: 17..1252

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1          11         21         31         41         51
|          |          |          |          |          |
ATGAAGTCGA TCCTAGATGG CCTTGCAGAT ACCACCTTCC GCACCATCAC CACTGACCTC  60
CTGTACGTGG GCTCAAATGA CATTCAGTAC GAAGACATCA AAGGAGATG AGGAGAACAT 120
CCAGTGTGGG GAGAACTTCA TGGACATAGA GTGTTTCATG GTCCTGAACC CCAGCCAGCA 180
GCTGGCCATT GCAGTCCTGT CCCTCACGCT GGGCACCTTC ACGGTCCTGG AGAACCTCCT 240
GGTGCTGTGC GTCATCCTCC ACTCCCGCAG CCTCCGCTGC AGGCCTTCCT ACCACTTCAT 300
CGGCAGCCTG GCGGTGGCAG ACCTCCTGGG GAGTGTCATT TTTGTCTACA GCTTCATTGA 360
CTTCCACGTG TTCCACCGCA AAGATAGCCG CAACGTGTTT CTGTTCAAAC TGGGTGGGGT 420
CACGGCCTCC TTCACTGCCT CCGTGGGCAG CCTGTTCCTC ACAGCCATCG ACAGGTACAT 480
ATCCATTCAC AGGCCCCTGG CCTATAAGAG GATTGTCACC AGGCCCAAGG CCGTGGTGGC 540
GTTTTGCCTG ATGTGGACCA TAGCCATTGT GATCGCCGTG CTGCCTCTCC TGGGCTGGAA 600
CTGCGAGAAA CTGCAATCGT TTGCTCAGA CATTTTCCCA CACATTGATG AAACCTACCT 660
GATGTTCTGG ATCGGGGTCA CCAGCGTACT GCTTCTGTTC ATCGTGTATG CGTACATGTA 720
TATTCTCTGG AAGGCTCACA GCCACGCCGT CCGCATGATT CAGCGTGGCA CCCAGAAGAG 780
CATCATCATC CACACGGTCTG AGGATGGGAA GGTACAGGTG ACCCGGCCAG ACCAAGCCCG 840
CATGGACATT AGGTTAGCCA AGACCCTGGT CCTGATCCTG GTGGTGTTGA TCATCTGCTG 900
GGGCCCTCTG CTTGCAATCA TGGTGTATGA TGTCTTTGGG AAGATGAACA AGCTCATTAA 960
GACCGTGTTT GCATTCTGCA GTATGCTCTG CCTGCTGAAC TCCACCGTGA ACCCCATCAT 1020
CTATGCTCTG AGGAGTAAGG ACCTGCGACA CGCTTTCCGG AGCATGTTTC CCTCTTGTGA 1080
AGGCACTGCG CAGCCTCTGG ATAACAGCAT GGGGGACTCG GACTGCCTGC ACAAACACGC 1140
AAACAATGCA GCCAGTGTTC ACAGGGCCGC AGAAAGCTGC ATCAAGAGCA CGGTCAAGAT 1200
TGCCAAGGTA ACCATGTCTG TGTCCACAGA CACGTCTGCC GAGGCTCTGT GA 
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Seq ID NO: 240 Protein sequence
Protein Accession #: NP_149421.1

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1          11         21         31         41         51
|          |          |          |          |          |
MALQIPPSAP SPLTSCTWAQ MTFSTKTSKE NEENIQCGEN PMDIECFMVL NPSQQLAIAV  60
LSLTLGTFTV LENLLVLCVI LHSRSLRCRP SYHFIGSLAV ADLLGSVIFV YSFIDFHVFH 120
RKDSRNVFLP KLGGVTASFT ASVGSLFLTA IDRYISIHRP LAYKRIVTRP KAVVAFCLMW 180
TIAIVIAVLP LLGWNCEKLQ SVCSDIFPHI DETYLMFWIG VTSVLLLFIV YAYMYILWKA 240
HSHAVRMIQR GTQKSIIIHT SEDGKVQVTR PDQARMDIRL AKTLVLILVV LIICWGPLLA 300
IMVYDVFGKM NKLIKTVFAF CSMLCLLNST VNPIIYALRS KDLRHAFRSM FPSCEGTAQP 360
LDNSMGDSDC LHKHANNAAS VHRAAESCIK STVKIAKVTM SVSTDTSAEA L
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Seq ID NO: 241 DNA sequence
Nucleic Acid Accession #: NM_003596.1

Coding sequence: 82..1194

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      1         11        21        31        41        51
      |         |         |         |         |         |
 5  GTAGACTGTC CATGGCCTGA ACATTTTCCG AAAATCATTT TGAGCAAAAT ATCTGTTTAA   60
    TAACAAGATA ACCACATCAA GATGGTTGGA AAGCTGAAGC AGAACTTACT ATTGGCATGT  120
    CTGGTGATTA GTTCTGTGAC TGTGTTTTAC CTGGGCCAGC ATGCCATGGA ATGCCATCAC  180
    CGGATAGAGG AACGTAGCCA GCCAGTCAAA TTGGAGAGCA CAAGGACCAC TGTGAGAACT  240
10  GGCCTGGACC TCAAAGCCAA CAAAACCTTT GCCTATCACA AAGATATGCC TTTAATATTT  300
    ATTGGRGGTG TGCCTCGGAG TGGAACCACA CTCATGAGGG CCATGCTGGA CGCACATCCT  360
    GACATTCGCT GTGGAGAGGA AACCAGGGTC ATTCCCCGAA TCCTGGCCCT GAAGCAGATG  420
    TGGTCACGGT CAAGTAAAGA GAAGATCCGC CTGGATGAGG CTGGTGTTAC TGATGAAGTG  480
    CTGGATTCTG CCATGCAAGC CTTCTTACTA GAAATTATCG TTAAGCATGG GGAGCCAGCC  540
15  CCTTATTTAT GTAATAAAGA TCCTTTTGCC CTGAAATCTT TAACTTACCT TTCTAGGTTA  600
    TTCCCCAATG CCAAATTTCT CCTGATGGTC CGAGATGGCC GGGCATCAGT ACATTCAATG  660
    ATTTCTCGAA AAGTTACTAT AGCTGGATTT GATCTGAACA GCTATAGGGA CTGTTTGACA  720
    AAGTGGAATC GTGCTATAGA GACCATGTAT AACCAGTGTA TGGAGGTTGG TTATAAAAAG  780
    TGCATGTTGG TTCACTATGA ACAACTTGTC TTACATCCTG AACGGTGGAT GAGAACACTC  840
20  TTAAAGTTCC TCCAGATTCC ATGGAACCAC TCAGTATTGC ACCATGAAGA GATGATTGGG  900
    AAAGCTGGGG GAGTGTCTCT GTCAAAAGTG GAGAGATCTA CAGACCAAGT AATCAAGCCA  960
    GTCAATGTAG GAGCTCTATC AAAATGGGTT GGGAAGATAC CGCCAGATGT TTTACAAGAC 1020
    ATGGCAGTGA TTGCTCCTAT GCTTGCCAAG CTTGGATATG ACCCATATGC CAACCCACCT 1080
    AACTACGGAA AACCTGATCC CAAAATTATT GAAAACACTC GAAGGGTCTA TAAGGGAGAA 1140
25  TTCCAACTAC CTGACTTTCT TAAAGAAAAA CCACAGACTG AGCAAGTGGA GTAGCAGAAC 1200
    CAGGAGCCTC TTCCATACAT GAGGAAAGAT TGCTGCCTTT TCAGCAGAAG GGAAATTCCT 1260
    AGGATTGGCT GTCCCCTGCC AAGCTTGGTG GAGCGTCTGC ACCTTGGCTG CGCCGCCTGT 1320
    GCATTTGCCA GTTTCCTCCC ACTGAGAGGA TGGAGGTGTC CGCACAGCTT TGGGCCTCGT 1380
    GAGGGATCTG CCTCCTGAGC AAAGAGCTCT TGATCCCGAT TTCATGCACA GCCCTGCAGT 1440
30  AAGGAGCCCA GAAGGAACAT GTGTTTCCTG TTAAAACTCC TCTTGTTCTC TTTTCTTACA 1500
    TTATGACGTT TGTTTTCAAG GAGAGGGTTT AAAAATGGGA TCCTGTAAGC AGACTTGGGC 1560
    AGTCTCCTTT TGAAATAGGT TGTCTGTACA TGTTCTAATG TTTTGTAGAA CACGTGTGCC 1620
    TGTTTAAGTG TATTGATGTG AATAATATTA AATATCCTAA TTATTTAATT CATTGTATTG 1680
    TTTCTGAGAA GTTGGGAAAT TACCATTATA CATTTACAAC CTAATGACTT TTGTATTTTA 1740
35  TTTTTCAAAA TAAAAGCTTT CAATGTGA .
```

Seq ID NO: 242 <u>Protein sequence</u>
Protein Accession #: NP_003587.1

```
      1         11        21        31        41        51
      |         |         |         |         |         |
40  MVGKLKQNLL LACLVISSVT VFYLGQHAME CHHRIEERSQ PVKLESTRTT VRTGLDLKAN   60
    KTFAYHKDMP LIFIGGVPRS GTTLMRAMLD AHPDIRCGEE TRVIPRILAL KQMWSRSSKE  120
    KIRLDEAGVT DEVLDSAMQA FLLEIIVKHG EPAPYLCNKD PFALKSLTYL SRLFPNAKFL  180
    LMVRDGRASV HSMISRKVTI AGFDLNSYRD CLTKWNRAIE TMYNQCMEVG YKKCMLVHYE  240
45  QLVLHPERWM RTLLKFLQIP WNHSVLHHEE MIGKAGGVSL SKVERSTDQV IKPVNVGALS  300
    KWVGKIPPDV LQDMAVIAPM LAKLGYDPYA NPPNYGKPDP KIIENTRRVY KGEFQLPDFL  360
    KEKPQTEQVE
```

Seq ID NO: 243 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001492.3
Coding sequence: 1395..2513

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      1         11        21        31        41        51
      |         |         |         |         |         |
55  ACGCGGGGCG CGCGGCTCCG TCGGCTACCG CGGGCGGGCG CAGGCGACGG GCACGGCGGG   60
    CGAGCGGGCG GTATGGCGGC GGCGGGGCCC GCGGCGGGGC CGACGGGGCC CGAGCCCATG  120
    CCGAGCTACG CGCAGCTAGT GCAGCGCGGC TGGGGCAGCG CGCTGGCCGC GGCGCGGGGC  180
    TGCACGGACT GCGGCTGGGG GCTGGCGCGT CGCGGCCTGG CTGAGCACGC GCACCTGGCG  240
60  CCGCCCGAGC TGCTGCTGCT GGCGCTCGGC GCGCTGGGCT GGACCGCGCT GCGCTCCGCG  300
    GCCACTGCGC GCCTCTTTCG GCCCCTGGCG AAGCGGTGCT GCCTGCCAGCC CAGAGATGCC  360
    GCCAAGATGC CCGAGAGCGC TTGGAAGTTT CTCTTCTACC TGGGCAGCTG GAGCTACAGT  420
    GCCTACCTGC TGTTTGGCAC CGACTACCCC TTCTTCCATG ACCCACCATC TGTCTTCTAC  480
    GACTGGACGC CGGGCATGGC AGTGCCACGG GACATTGCAG CCGCCTACCT GCTCCAGGGA  540
65  AGCTTCTATG GCCACTCCAT CTACGCTACG CTATACATGG ACACCTGGCG CAAGGACTCG  600
    GTGGTCATGC TGCTCCACCA CGTGGTCACT CTCATCCTCA TGTCTCCTC CTACGCCTTC  660
    CGGTACCACA ATGTGGGCAT CCTTGTGCTC TTCCTGCACG ATATCAGTGA CGTGCAGCTT  720
    GAGTTCACCA AGCTCAACAT TTACTTCAAG TCCCGCGGCG GCTCCTACCA TCGGCTGCAT  780
    GCCTTGGCAG CAGACTTGGG CTGCCTCAGC TTCGGCTTCA GCTCGGTTCTG GTTCCGCCTC  840
70  TACTGGTTCC CGCTCAAGGT CCTGTATGCC ACCAGTCACT GCAGTCTGCG CACGGTGCCT  900
    GACATCCCCT TCTACTTCTT CTTCAATGCG CTCCTGCTGC TGCTCACCCT TATGAACCTC  960
    TACTGGTTCC TGTACATCGT GGCGTTTGCA GCCAAGGTGT TGACAGGCCA GGTGCACGAG 1020
    CTGAAGGACC TGCGGGAGTA TGACACAGCG GAGGCCCAGA GCCTGAAGCC CAGCAAAGCC 1080
    GAGAAGCCAC TGAGGAACGG CCTGGTGAAG GACAAGCGCT TCTGAACCCC TCGGCCCCGC 1140
75  CCCCGTGGAC CCGGCCCCAC CCCGAATACC CCGGCCACGC TCCCCGTCCT TGGCCGCCCC 1200
    TCCACCCCCT CCAACTCTGC TCCTCTAGGG CCGCCGCCAC CTCCCCTGGG ACCCCGCCCC 1260
    CTCATCCTGC CTCCATTTCC CGGCCACGCC CCCCAGGACC CCTGCCCCTC CGGGGACACC 1320
    GGCCCCGCCC TCAGCCCACT GGTCCCGGGC CGCCGCGGAC CCTGCGCACT CTCTGGTCAT 1380
    CGCCTGGGAG GAAGATGCCA CCGCCGCAGC AAGGTCCCTG CGGCCACCAC CTCCTCCTCC 1440
80  TCCTGGCCCT GCTGCTGCCC TCGCTGCCCC TGACCCGCGC CCCGTGCCCC CAGGCCCAG 1500
    CCGCCGCCCT GCTCCAGGCT CTAGGACTGC GCGATGAGCC CCAGGGTGCC CCCAGGCTCC 1560
    GGCCGGTTCC CCCGGTCATG TGGCGCCTGT TTCGACGCCG GGACCCCCAG GAGACCAGGT 1620
    CTGGCTCGCG GCGGACGTCC CCAGGGGTCA CCCTGCAACC GTGCCACGTG GAGGAGCTGG 1680
    GGGTCGCCGG AAACATCGTG CGCCACATCC GGACCGGCGG TGCGCCCACC CGGGCCTCGG 1740
    AGCCTGTCTC GGCCGCGGGG CATTGCCCTG AGTGGACAGT CGTCTTCGAC CTGTCGGCTG 1800
```

```
TGGAACCCGC  TGAGCGCCCG  AGCCGGGCCC  GCCTGGAGCT  GCGTTTCGCG  GCGGCGGCGG  1860
CGGCAGCCCC  GGAGGGCGGC  TGGGAGCTGA  GCGTGGCGCA  AGCGGGCCAG  GGCGCGGGCG  1920
CGGACCCCGG  GCCGGTGCTG  CTCCGCCAGT  TGGTGCCCGC  CCTGGGGCCG  CCAGTGCGCG  1980
CGGAGCTGCT  GGGCGCCGCT  TGGGCTCGCA  ACGCCTCATG  GCCGCGCAGC  CTCCGCCTGG  2040
CGCTGGCGCT  ACGCCCCGG   GCCCCTGCCG  CCTGCGCGCG  CCTGGCCGAG  GCCTCGCTGC  2100
TGCTGGTGAC  CCTCGACCCG  CGCCTGTGCC  ACCCCCTGGC  CCGGCCGCGG  CGCGACGCCG  2160
AACCCGTGTT  GGGCGGCGGC  CCCGGGGGCG  CTTGTCGCGC  GCGGCGGCTG  TACGTGAGCT  2220
TCCGCGAGGT  GGGCTGGCAC  CGCTGGGTCA  TCGCGCCGCG  CGGCTTCCTG  GCCAACTACT  2280
GCCAGGGTCA  GTGCGCGCTG  CCCGTCGCGC  TGTCGGGGTC  CGGGGGGCCG  CCGGCGCTCA  2340
ACCACGCTGT  GCTGCGCGCG  CTCATGCACG  CGGCCGCCCC  GGGAGCCGCC  GACCTGCCCT  2400
GCTGCGTGCC  CGCGCGCCTG  TCGCCCATCT  CCGTGCTCTT  CTTTGACAAC  AGCGACAACG  2460
TGGTGCTGCG  GCAGTATGAG  GACATGGTGG  TGGACGAGTG  CGGCTGCCGC  TAACCCGGGG  2520
CGGGCAGGGA  CGCGGGCCCA  ACAATAAATG  CCGCGTGGTC  TGCTC
```

Seq ID NO: 244 Protein sequence
Protein Accession #: NP_001483.2

```
1          11         21         31         41         51
|          |          |          |          |          |
MPPPQQGPCG  HHLLLLLALL  LPSLPLTRAP  VPPGPAAALL  QALGLRDEPQ  GAPRLRPVPP   60
VMWRLFRRRD  PQETRSGSRR  TSPGVTLQPC  HVEELGVAGN  IVRHIPDRGA  PTRASEPVSA  120
AGHCPEWTVV  FDLSAVEPAE  RPSRARLELR  FAAAAAAAPE  GGWELSVAQA  GQGAGADPGP  180
VLLRQLVPAL  GPPVRAELLG  AAWARNASWP  RSLRLALALR  PRAPAACARL  AEASLLLVTL  240
DPRLCHPLAR  PRRDAEPVLG  GGPGGACRAR  RLYVSFREVG  WHRWVIAPRG  FLANYCQGQC  300
ALPVALSGSG  GPPALNHAVL  RALMHAAAPG  AADLPCCVPA  RLSPISVLFF  DNSDNVVLRQ  360
YEDMVVDECG  CR
```

Seq ID NO: 245 DNA sequence
Nucleic Acid Accession #: NM_021267.1
Coding sequence: 17..1125

```
1          11         21         31         41         51
|          |          |          |          |          |
ACGCGGGGCG  CGCGGCTCCG  TCGGCTACCG  CGGGCGGGCG  CAGGCGACGG  GCACGGCGGG   60
CGAGCGGGCG  GTATGGCGGC  GGCGGGGCCC  GCGGCGGGGC  CGACGCTGCGC GCGAGCCCATG  120
CCGAGCTACG  CGCAGCTAGT  GCAGCGCGGC  TGGGGCAGCG  CGCTGGCGGC  GGCGCGGGGC  180
TGCACGGACT  GCGGCTGGGG  GCTGGCGCGT  CGCGGCCTGG  CTGAGCACGC  GCACCTGGCG  240
CCGCCCGAGC  TGCTGCTGCT  GGCGCTCGGC  GCGCTGGGCT  GGACCGCGCT  GCGCTCCGCG  300
GCCACTGCGC  GCCTCTTTCG  GCCCCTGGCG  AAGCGGTGCT  GCCTCCAGCC  CAGAGATGCC  360
GCCAAGATGC  CCGAGAGCGC  TTGGAAGTTT  CTCTTCTACC  TGGGCAGCTG  GAGCTACAGT  420
GCCTACCTGC  TGTTTGGCAC  CGACTACCCC  TTCTTCCATG  ACCCACCATC  TGTCTTCTAC  480
GACTGGACGC  CGGGCATGGC  AGTGCCACGG  GACATTGCAG  CCGCCTACCT  GCTCCAGGGA  540
AGCTTCTATG  GCCACTCCAT  CTACGCTACG  CTATACATGG  ACACCTGGCG  CAAGGACTCG  600
GTGGTCATGC  TGCTCCACCA  CGTGGTCACT  CTCATCCTCA  TCGTCTCCTC  CTACGCCTTC  660
CGGTACCACA  ATGTGGGCAT  CCTTGTGCTC  TTCCTGCACG  ATATCAGTGA  CGTGCAGCTT  720
GAGTTCACCA  AGCTCAACAT  TTACTTCAAG  TCCCGCGGCG  GCTCCTACCA  TCGGCTGCAT  780
GCCTTGGCAG  CAGACTGGGG  CTGCCTCAGC  TTCGGCTTCA  GCTGGTTCTG  GTTCCGCCTC  840
TACTGGTTCC  CGCTCAAGGT  CCTGTGTATGCC ACCAGTCACT  GCAGTCTGCG  CACGGTGGCT  900
GACATCCCCT  TCTACTTCTT  CTTCAATGCG  CTCCTGCTGC  TGCTCACCCT  TATGAACCTC  960
TACTGGTTCC  TGTACATCGT  GGCGTTTGCA  GCCAAGGTGT  TGACAGGCCA  GGTGCACGAG  1020
CTGAAGGACC  TGCGGGAGTA  TGACACAGCG  GAGGCCCAGA  GCCTGAAGCC  CAGCAAAGCC  1080
GAGAAGCCAC  TGAGGAACGG  CCTGGTGAAG  GACAAGCGCT  TCTGAACCCC  TCGGCCCCGC  1140
CCCCGTGGAC  CCGGCCCCAC  CCCGAATACC  CCGGCCACGC  TCCCCGTCCT  TGGCCGCCCC  1200
TCCACCCCCT  CCAACTCTGC  TCCTCTAGGG  CCGCCGCCAC  CTCCCCTGGG  ACCCCGCCCC  1260
CTCATCCTGC  CTCCATTTCC  CGGCCACGCC  CCCCAGGACC  CCTGCCCCTC  CGGGGACACC  1320
GGCCCCGCCC  TCAGCCCACT  GGTCCCGGGC  CGCCGCGGAC  CCTGCCGCACT CTCTGGTCAT  1380
CGCCTGGGAG  GAAGATGCCA  CCGCCGCAGC  AAGGTCCCTG  CGGCCACCAC  CTCCTCCTCC  1440
TCCTGGCCCT  GCTGCTGCCC  TCGCTGCCCC  TGACCCGCGC  CCCGGTGCCC  CCAGGCCCAG  1500
CCGCCGCCCT  GCTCCAGGCT  CTAGGACTGC  GCGATGAGCC  CCAGGGTGCC  CCCAGGCTCC  1560
GGCCGGTTCC  CCCGGTCATG  TGGCGCCTGT  TTCGACGCCG  GGACCCCCAG  GAGACCAGGT  1620
CTGGCTCGCG  GCGGACGTCC  CCAGGGGTCA  CCCTGCCAACC CGGCTTCCTG  GAGGAGCTGG  1680
GGGTCGCCGG  AAACATCGTG  CGCCACATCC  CGGACCGGCG  TGCGCCCACC  CGGGCCTCGG  1740
AGCCTGTCTC  GGCCGCGGGG  CATTGCCCTG  AGTGGACAGT  CGTCTTCGAC  CTGTCGGCTG  1800
TGGAACCCGC  TGAGCGCCCG  AGCCGGGCCC  GCCTGGAGCT  GCGTTTCGCG  GCGGCGGCGG  1860
CGGCAGCCCC  GGAGGGCGGC  TGGGAGCTGA  GCGTGGCGCA  AGCGGGCCAG  GGCGCGGGCG  1920
CGGACCCCGG  GCCGGTGCTG  CTCCGCCAGT  TGGTGCCCGC  CCTGGGGCCG  CCAGTGCGCG  1980
CGGAGCTGCT  GGGCGCCGCT  TGGGCTCGCA  ACGCCTCATG  GCCGCGCAGC  CTCCGCCTGG  2040
CGCTGGCGCT  ACGCCCCGG   GCCCCTGCCG  CCTGCGCGCG  CCTGGCCGAG  GCCTCGCTGC  2100
TGCTGGTGAC  CCTCGACCCG  CGCCTGTGCC  ACCCCCTGGC  CCGGCCGCGG  CGCGACGCCG  2160
AACCCGTGTT  GGGCGGCGGC  CCCGGGGGCG  CTTGTCGCGC  GCGGCGGCTG  TACGTGAGCT  2220
TCCGCGAGGT  GGGCTGGCAC  CGCTGGGTCA  TCGCGCCGCG  CGGCTTCCTG  GCCAACTACT  2280
GCCAGGGTCA  GTGCGCGCTG  CCCGTCGCGC  TGTCGGGGTC  CGGGGGGCCG  CCGGCGCTCA  2340
ACCACGCTGT  GCTGCGCGCG  CTCATGCACG  CGGCCGCCCC  GGGAGCCGCC  GACCTGCCCT  2400
GCTGCGTGCC  CGCGCGCCTG  TCGCCCATCT  CCGTGCTCTT  CTTTGACAAC  AGCGACAACG  2460
TGGTGCTGCG  GCAGTATGAG  GACATGGTGG  TGGACGAGTG  CGGCTGCCGC  TAACCCGGGG
```

Seq ID NO: 246 Protein sequence
Protein Accession #: NP_067090.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MAAAGPAAGP  TGPEPMPSYA  QLVQRGWGSA  LAAARGCTDC  GWGLARRGLA  EHAHLAPPEL   60
LLLALGALGW  TALRSAATAR  LFRPLAKRCC  LQPRDAAKMP  ESAWKPLFYL  GSWSYSAYLL  120
FGTDYPFFHD  PPSVFYDWTP  GMAVPRDIAA  AYLLQGSFYG  HSIYATLYMD  TWRKDSVVML  180
```

```
LHHVVTLILI VSSYAFRYHN VGILVLFLHD ISDVQLEFTK LNIYFKSRGG SYHRLHALAA    240
DLGCLSFGFS WFWFRLYWFP LKVLYATSHC SLRTVPDIPF YFFFNALLLL LTLMNLYWFL    300
YIVAFAAKVL TGQVHELKDL REYDTAEAQS LKPSKAEKPL RNGLVKDKRF
```

Seq ID NO: 247 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_002081.1
Coding sequence: 222..1898

```
1          11         21         31         41         51
|          |          |          |          |          |
GGCTGCCCGA GCGAGCGTTC GGACCTCGCA CCCCGCGCGC CCCGCGCCGC CGCCGCCGCC    60
GGCTTTTGTT GTCTCCGCCT CCTCGGCCGC CGCCGCCTCT GGACCGCGAG CCGCGCGCGC   120
CGGGACCTTG GCTCTGCCCT TCGCGGGCGG GAACTGCGCA GGACCCGGCC AGGATCCGAG   180
AGAGGCGCGG GCGGGTGGCC GGGGGGCGCCG CCGGCCCCGC CATGGAGCTC CGGGCCCGAG   240
GCTGGTGGCT GCTATGTGCG GCCGCAGCGC TGGTCGCCTG CGCCCGCGGG GACCCGGCCA   300
GCAAGAGCCG GAGCTGCGGC GAGGTCCGCC AGATCTACGG AGCCAAGGGC TTCAGCCTGA   360
GCGACGTGCC CCAGGCGGAG ATCTCGGGTG AGCACCTGCG GATCTGTCCC CAGGGCTACA   420
CCTGCTGCAC CAGCGAGATG GAGGAGAACC TGGCCAACCG CAGCCATGCC GAGCTGGAGA   480
CCGCGCTCCG GGACAGCAGC CGCGTCCTGC AGGCCATGCT TGCCACCCAG CTGCGCAGCT   540
TCGATGACCA CTTCCAGCAC CTGCTGAACG ACTCGGAGCG GACGCTGCAG GCCACCTTCC   600
CCGGCGCCTT CGGAGAGCTG TACACGCAGA ACGCGAGGGC CTTCCGGGAC CTGTACTCAG   660
AGCTGCGCCT GTACTACCGC GGTGCCAACC TGCACCTGGA GGAGACGCTG GCCGAGTTCT   720
GGGCCCGCCT GCTCGAGCGC CTCTTCAAGC AGCTGCACCC CCAGCTGCTG CTGCCTGATG   780
ACTACCTGGA CTGCCTGGGC AAGCAGGCCG AGGCGCTGCG GCCCTTCGGG GAGGCCCCGA   840
GAGAGCTGCG CCTGCGGGCC ACCCGTGCCT TCGTGGCTGC TCGCTCCTTT GTGCAGGGCC   900
TGGGCGTGGC CAGCGACGTG GTCCGGAAAG TGGCTCAGGT CCCCCTGGGC CCGGAGTGCT   960
CGAGAGCTGT CATGAAGCTG GTCTACTGTG CTCACTGCCT GGGAGTCCCC GGCGCCAGGC  1020
CCTGCCCTGA CTATTGCCGA AATGTGCTCA AGGGCTGCCT TGCCAACCAG GCCGACCTGG  1080
ACGCCGAGTG GAGGAACCTC CTGGACTCCA TGGTGCTCAT CACCGACAAG TTCTGGGGTA  1140
CATCGGGTGT GGAGAGTGTC ATCGGCAGCG TGCACACGTG GCTGGCGGAG GCCATCAACG  1200
CCCTCCAGGA CAACAGGGAC ACGCTCACGG CCAAGGTCAT CCAGGGCTGC GGGAACCCCA  1260
AGGTCAACCC CCAGGGCCCT GGGCCTGGAG AGAAGCGGCG CCGGGGCAAG CTGGCCCCGC  1320
GGGAGAGGCC ACCTTCAGGC ACGCTGGGAGA AGCTGGTCTC TGAAGCCAAG GCCCAGCTCC  1380
GCGACGTCCA GGACTTCTGG ATCAGCCTCC CAGGGACACT GTGCAGTGAG AAGATGGCCC  1440
TGAGCACTGC CAGTGATGAC CGCTGCTGGA ACGGGATGGC CAGAGGCCGG TACCTCCCCG  1500
AGGTCATGGG TGACGGCCTG GCCAACCAGA TCAACAACCC CGAGGTGGAG GTGGACATCA  1560
CCAAGCCGGA CATGACCATC CGGCAGCAGA TCATGCAGCT GAAGATCATG ACCAACCGGC  1620
TGCGCAGCGC CTACAACGGC AACGACGTGG ACTTCCAGGA CGCCAGTGAC GACGGCAGCG  1680
GCTCGGGCAG CGGTGATGGC TGTGTCGGATG ACCTCTGCGG CCGGAAGGTC AGCAGGAAGA  1740
GCTCCAGCTC CCGGACGCCC TTGACCCATG CCCTCCCAGG CCTGTCAGAG CAGGAAGGAC  1800
AGAAGACCTC GGCTGCCAGC TGCCCCCAGC CCCCGACCTT CCTCCTGCCC CTCCTCCTCT  1860
TCCTGGCCCT TACAGTAGCC AGGCCCCGGT GGCGGTAACT GCCCCAAGGC CCCAGGGACA  1920
GAGGCCAAGG ACTGACTTTG CCAAAAAATAC AACACAGACG ATATTTAATT CACCTCAGCG  1980
TGGAGAGGCC TGGGGTGGGA CAGGGAGGGC CGGCGGCTCT GAGCAGGGGC AGGCGCAGAG  2040
GTCCCAGCCC CAGGCCTGGC CTCGCCTGCC TTTCTGCCTT TTAATTTTGT ATGAGGTCCT  2100
CAGGTCAGCT GGGAGCCAGT GTGCCCAAAA GCCATGTATT TCAGGGACCT CAGGGGCACC  2160
TCCGGCTGCC TAGCCCTCCC CCAGCTCCC TGCACCGCCG CAGAAGCAGC CCCTCGAGGC  2220
CTACAGAGGA GGCCTCAAAG CAACCCGCTG GAGCCCACAG CGAGCCTGTG CCTTCCTCCC  2280
CGCCTCCTCC CACTGGGACT CCCAGCAGAG CCCACCAGCC AGCCCTGGCC CACCCCCCAG  2340
CCTCCAGAGA AGCCCCGCAC GGGCTGTCTG GGTGTCCGCA ATCCAGGGTC TGGCAGAGCC  2400
TCTGAGATGA TGCATGATGC CCTCCCCTCA GCGCAGGCTG CAGAGCCCGG CCCCACCTCC  2460
CTGCGCCCTT GAGGGGCCCC AGCGTCTGCA GGGTGACGCC TGAGACAGCA CCACTGCTGA  2520
GGAGTCTGAG GACTGTCCTC CCACAGACCC TGCAGTGAGG GGCCCTCCAT GCGCAGATGA  2580
GGGGCCACTG ACCCACCTGC GCTTCTGCTG GAGGAGGGGA AGCTGGGCCC AAAGGCCCAG  2640
GGAGGCAGCG TGGGCTCTGC CAATGTGGGC TGCCCCTCGC ACACAGGGCAG CACAGGGCAG  2700
GCCTTGCTGG GGTCCAGGGC TGTTGGAGGA CCCCGAGGGC TGAGGAGCAG CCAGGACCCG  2760
CCTGCTCCCA TCCTCACCCA GATCAGGAAC CAGGGCCTCC CTGTTCACGG TGACACAGGT  2820
CAGGGCTCAG AGTGACCCTC GGCTGTCACC TGCTCACAGG GATGCTGGTG GCTGGTGAGA  2880
CCCCGCACTG CACACGGGAA TGCCTAGGTC CCTTCCCGAC CCAGCCAGCT GCACTGCAGG  2940
GCACGGGGAC CTGGATAGTT AAGGGCTTTT CCAAACATGC ATCCATTTAC TGACACTTCC  3000
TGTCCTTGTT CATGGAGAGC TGTTCGCTCC TCCCAGATGG CTTCGGAGGC CCGCAGGGCC  3060
CACCTTGGAC CCTGGTGACC TCCTGTCACT CACTGAGGCC ATCAGGGCCC TGCCCCAGGC  3120
CTGGACGGGC CCTCCTTCCC TCCTGTGCCC CAGCTGCCAG GTGGCCCTGG GGAGGGGTGG  3180
TGTGTGTGTTG GGAAGGGGTC CTGCAGGGGG AGGAGGACTT GGAGGGTCTG GGGGCAGCTG  3240
TCCTGAACCG ACTGACCCTG AGGAGGCCGC TTAGTGCTGC TTTGCTTTTC ATCACCGTCC  3300
CGCACAGTGG ACGGAGGTCC CCGGTTGCTG GTCAGGTCCC CATGGCTTGT TCTCTGGAAC  3360
CTGACTTTAG ATGTTTGGG ATCAGGAGCC CCCAACACAG GCAAGTCCAC CCCATAATAA  3420
CCCTGCCAGT GCCAGGGTGG GCTGGGGACT CTGGCACAGT GATGCCGGGC GCCAGGACAG  3480
CAGCACTCCC GCTGCACACA GACGGCCTAG GGGTGGCGCT CAGACCCCAC CCTACGCTCA  3540
TCTCTGGAAG GGGCAGCCCT GAGTGGTCAC TGGTCAGGGC AGTGGCCAAG CCTGCTGTGT  3600
CCTTCCTCCA CAAGGTCCCC CCACCGCTCTA GTGTCAGCGG GTGACGTGTG TTCTTTTGAG  3660
TCCTTGTATG AATAAAAGGC TGGAAACCTA AA
```

Seq ID NO: 248 <u>Protein sequence</u>
Protein Accession #: NP_002072.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MELRARGWWL LCAAAALVAC ARGDPASKSR SCGEVRQIYG AKGFSLSDVP QAEISGEHLR     60
ICPQGYTCCT SEMEENLANR SHAELETALR DSSRVLQAML ATQLRSFDDH FQHLLNDSER    120
TLQATFPGAF GELYTQNARA FRDLYSELRL YYRGANLHLE ETLAEFWARL LERLFKQLHP    180
QLLLPDDYLD CLGKQAEALR PFGEAPRELR LRATRAFVAA RSFVQGLGVA SDVVRKVAQV    240
PLGPECSRAV MKLVYCAHCL GVPGARPCPD YCRNVLKGCL ANQADLDAEW RNLLDSMVLI    300
TDKFWGTSGV ESVIGSVHTW LAEAINALQD NRDTLTAKVI QGCGNPKVNP QGPGPEEKRR    360
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RGKLAPRERP PSGTLEKLVS EAKAQLRDVQ DFWISLPGTL CSEKMALSTA SDDRCWNGMA   420
RGRYLPEVMG DGLANQINNP EVEVDITKPD MTIRQQIMQL KIMTNRLRSA YNGNDVDFQD   480
ASDDGSGSGS
```

Seq ID NO: 249 DNA sequence
Nucleic Acid Accession #: NM_001492.3
Coding sequence: 8..1864

```
1          11         21         31         41         51
|          |          |          |          |          |
GAAGGCCATG GTCTCCCCAC GGATGTCCGG GCTCCTCTCC CAGACTGTGA TCCTAGCGCT   60
CATTTTCCTC CCCCAGACAC GGCCCGCTGG CGTCTTCGAG CTGCAGATCC ACTCTTTCGG   120
GCCGGGTCCA GGCCCTGGGG CCCCGCGGTC CCCCTGCAGC GCCCGGCTCC CCTGCCGCCT   180
CTTCTTCAGA GTCTGCCTGA AGCCTGGGCT CTCAGAGGAG GCCGCCGAGT CCCCGTGCGC   240
CCTGGGCGCG GCGCTGAGTG CGCGCGGACC GGTCTACACC GAGCAGCCCG GAGCGCCCGC   300
GCCTGATCTC CCACTGCCCG ACGGGCTCTT GCAGGTGCCC TTCCGGGACG CCTGGCCTGG   360
CACCTTCTCT TTCATCATCG AAACCTGGAG AGAGGAGTTA GGAGACCAGA TTGGAGGGCC   420
CGCCTGGAGC CTGCTGGCGC GCGTGGCTGG CAGGCGGCGC TTGGCAGCCG GAGGCCCGTG   480
GGCCCGGGAC ATTCAGCGCG CAGGCGCCTG GGAGCTGCGC TTCTCGTACC GCGCGCGCTG   540
CGAGCCGCCT GCCGTCGGGA CCGCGTGCAC GCGCCTCTGC CGTCCGCGCA GCGCCCCCTC   600
GCGGTGCCGT CCGGGACTGC GCCCCTGCGC ACCGCTGAG GACGAATGTG AGGCGCCGCT   660
GGTGTGCCGA GCAGGCTGCA GCCCTGAGCA TGGCTTCTGT GAACAGCCCG GTGAATGCCG   720
ATGCCTAGA GGCTGGACTG GACCCCTCTG CACGGTCCCT GTCTCCACCA GCAGCTGCCT   780
CAGCCCCAGG GGCCCGTCCT CTGCTACCAC CGGATGCCTT GTCCCTGGGC CTGGGCCCTG   840
TGACGGGAAC CCGTGTGCCA ATGGAGGCAG CTGTAGTGAG ACACCCAGGT CCTTTGAATG   900
CACCTGCCCG CGTGGGTTCT ACGGGCTGCG GTGTGAGGTG AGCGGGGTGA CATGTGCAGA   960
TGGACCCTGC TTCAACGGCG GCTTGTGTGT CGGGGGGTGCA GACCCTGACT CTGCCTACAT   1020
CTGCCACTGC CCACCTGGTT TCCAAGGCTC CAACTGTGAG AAGAGGGTGG ACCGGTGCAG   1080
CCTGCAGCCA TGCCGCAATG GCGGGACTCTG CCTGGACCTG GGCCACGCCC TGCGCTGCCG   1140
CTGCCGCGCC GGCTTCGCGG GTCCTCGCTG CGAGCACGAC CTGGACGACT GCGCGGGCCG   1200
CGCCTGCGCT AACGGCGGCA CGTGTGTGGA GGGCGGCGGC GCGCACCGCT GCTCCTGCGC   1260
GCTGGGCTTC GGCGGCCGCG ACTGCCGGGA GCGCGCGGAC CCGTGCGCCG CGCGCCCCTG   1320
TGCTCACGGC GGCGGCTGCT ACGCCCACTT CTCCGGCCTC GTCTGCGCTT GCGCTCCCGG   1380
CTACATGGGA GCGCGGTGTG AGTTCCCAGT GCACCCCGAC GGCGCAAGCG CCTTGCCCGC   1440
GGCCCGGCCG GGCCTCAGGC CGGGGGACCC TCAGCGCTAC CTTTTGCCTC CGGCTCTGGG   1500
ACTGCTCGTG GCCGCGGGCG TGGCCGGCGC TGCGCTCTTG CTGGTCCACG TGCGCCGCCG   1560
TGGCCACTCC CAGGATGCTG GGTCTCGCTT GCTGGCTGGG ACCCCGGAGC CGTCAGTCCA   1620
CGCACTCCCG GATGCACTCA ACAACCTAAG GACGCAGGAG GGTTCCGGGG ATGGTCCGAG   1680
CTCGTCCGTA GATTGGAATC GCCCTGAAGA TGTAGACCCT CAAGGGATTT ATGTCATATC   1740
TGCTCCTTCC ATCTACGCTC GGGAGGTAGC GACGCCCCTT TTCCCCCCGC TACACACTGG   1800
GCGCGCTGGG CAGAGGCAGC ACCTGCTTTT TCCCTACCCT TCCTCGATTC TGTCCGTGAA   1860
ATGAATTGGG TAGAGTCTCT GGAAGGTTTT AAGCCCATTT TCAGTTCTAA CTTACTTTCA
```

Seq ID NO: 250 Protein sequence
Protein Accession #: NP_058637.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MVSPRMSGLL SQTVILALIF LPQTRPAGVF ELQIHSFGPG PGPGAPRSPC SARLPCRLFF   60
RVCLKPGLSE EAAESPCALG AALSARGPVY TEQPGAPAPD LPLPDGLLQV PPRDAWPGTF   120
SFIIETWREE LGDQIGGPAW SLLARVAGRR RLAAGGPWAR DIQRAGAWEL RPSYRARCEP   180
PAVGTACTRL CRPRSAPSRC GPGLRPCAPL EDECEAPLVC RAGCSPEHGF CEQPGECRCL   240
EGWTGPLCTV PVSTSSCLSP RGPSSATTGC LVPGPGPCDG NPCANGGSCS ETPRSFECTC   300
PRGFYGLRCE VSGVTCADGP CFNGGLCVGG ADPDSAYICH CPPGFQGSNC EKRVDRCSLQ   360
PCRNGGLCLD LGHALRCRCR AGFAGPRCEH DLDDCAGRAC ANGGTCVEGG GAHRCSCALG   420
FGGRDCRERA DPCAARPCAH GGRCYAHFSG LVCACAPGYM GARCEPPVHP DGASALPAAP   480
PGLRPGDPQR YLLPPALGLL VAAGVAGAAL LLVHVRRRGH SQDAGSRLLA GTPEPSVHAL   540
PDALNNLRTQ EGSGDGPSSS VDWNRPEDVD PQGIYVISAP SIYAREVATP LFPPLHTGRA   600
GQRQHLLFPY PSSILSVK
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Seq ID NO: 251 DNA sequence
Nucleic Acid Accession #: CAT cluster

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1          11         21         31         41         51
|          |          |          |          |          |
GAAATATAAC CATTGCAATT AGAAAATATC CAAAATAGCC TGTTATCTTC CACGTGGCCT   60
AGATTATTGA CAATCCCAAA TATACAATTT TTCTTTAAAA GTAGTACAAT TTCCTTTGTA   120
GCTTCAATTC CTTATATGAC TTCAGACTGG AGAAGCCTGT TAAACCACTG TTAGTTTCAG   180
TTAGAAAGTC TGAGAGACTT TATACATAAA TTCTCAATTT GGCTGCTGTA CACGTGCCAG   240
AGTTTTACTA CTGTAGTGAC CGTTGAGAAG ACCCTTGTTT ATTTACATTT GAAGCACTGT   300
TTGTGCAAAC AACCTTTCAT TGTTAAGTGC CTGTATTCCT TTCATTTACT TCATGTCCAG   360
GGGTGCTATT TACCTAGAAC CATTGTCTAC TACAATTAAC ATTTACATTA CAAAGTGTGT   420
GGTTTTCTTT TTCAAGGAGG TTCAATTAAG GCAATAAGAT GTTTGCTGGA GAAACCTATT   480
GTTTACTGAA AGCACTCAAT GAAGTCAAAT TACTGAAGCT TTTGCCTACA TCTTGGTCTT   540
TTATGTAAAT ATGTTAAATA TAACATCTAA GGAAAATAAA CAATATTATA ATTATGTGTT   600
TGCCATTGTC ATATCAAACT TGCTTTGTAT CATACTAATG TTACATAACT TATCGATCAA   660
TAAAAATACA TTTCAATGTT AAAAAAAAAA AAAAAAA
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Seq ID NO: 252 DNA sequence
Nucleic Acid Accession #: Eos sequence

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1          11         21         31         41         51
|          |          |          |          |          |
AGGTACTGCC AGAAAGGATC AGGACCTGGA GTCTGGCAAG AGGAAGACAG AGGCCTGTGT   60
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      GGGAAGCGAG TTGTTATCTT TGGTTATCTA GCTGTATGAG TGTATTGGTC TTCATAAAGC    120
      TAGATAACCG AAAGTAAAAA CTTCTTCAAG ATCGCCGGGG AGCGTGTGAG AATGAAAGAC    180
      TACAGCCGAG AGACAGTAAA AACCAGAAAG GTCAGGAATA CTTATTGAAT CTAACTTTGT    240
      TTTTGTTTTG TTTTTTTCCT TATGATTAAA GGTGGGATGA GAGAAAATTA AATGACACAC    300
5     ACATGCTAAA ATATCAAGGT TCCAGATATG TCTTGAGAGG GGTTGTTGCA GCTGCAAAGG    360
      AGAAGTGTAT AGTGATAATG AGTAAAGATG CATGTGCCAGT TTGTTCTATT TTAAGGCAGA    420
      AGTTATATCA GGGATTTTTT TCTTAGAAAG GTGTTGCAGA GATGTCTGGT ACCTAGTTTA    480
      AAAATGATTC CATAATATGT AGACTTGGGC AGTTCCTTTG GGAGGCACCT CCCTCTCAAA    540
      ATTTGAAGAT TGTGCTTGGA AATTACTTTA CATGTATTTG GGCTGTATGT CAATTTGTAC    600
10    GAAATTAGAC TTTCAGAAAA GTTTATACTG GAAGGTTAAT AATTTGTATC TACTGAGGAC    660
      TTAGAGCTAG CAGGCAAAAT GAAAAAAAAA AAAAAAAARG CAAGGGCTGA TTTTTATTCT    720
      TCTATTCAAA ATACAAGGAC AGATGCTTCT CTGTTCCAAG AGGGTTTCCT TGAGGAAGCT    780
      ACTGAAGCAG AAAGACATGA TGGAGACGAG ATCGCCTCCC CTCTTGTCAA AGTGTTAAAA    840
15    AAATGTTCTG TCTTACTCTG CGCCTAGCAT TGGAAATGAA AGTGACATTT ACGCCACAAC    900
      CCACGTGTGC GCCTCCTCTC TTTTTGTTTA AGGATGATCA GGTCTATCCA GGAAACAGCT    960
      CTGGCATCCC AAACTGAAAT AATTAGGACG TATATAGACC TGACAAAAAT GGAAAGGGGG   1020
      TGGGGAATCT GAGGGTCTGT CTTGCCTAAT TGATTCCGCT AAACGGAATG CAGGAGATGT   1080
      GAACGGCAGG ACGCTCCGAT TCCCACGCTC GGGGGCAAGT GATAAAGCGG GGCCGGGCAG   1140
20    CCTATGACAG ACAGCCCTGT TGGGGGGTGG GGGTATGAAA AAAACATCAA GTGCACACAC   1200
      CATACTCATC TCCATCGCTT AAGAAAGTAA AGGCATTTCC CACCCACAGC CATCTGCAGC   1260
      TTCCCAAATG GCAGCACCAA CTGGTCTGTA GCTGCTACAT AGTCTGCTTC TGTTAATTTT   1320
      TTAACCACTG TTTAATCTGG CCATAATTAA GTTTGGCTTT CTTCGTTGTT TGAGATTTTC   1380
      AGAATTCAAG GCAAGCTAGT AGAAAGCAAT TCCAAGAAAG TCCCATGACT GCCTGCCCCT   1440
25    AATGTCAAAA TCTCAGTCCA TGAGATTATG GCCTTGTGAC CACATTTTTG CTTTTGTTTT   1500
      GGGTGGGCAA ATGTGTATAG AGATAAAATA CATATCTCTA TATAACAGTC GTTATTATAA   1560
      TTTCATGAGG CTTTTTACCT CTTAACATGA TACATCTAGG AACTTGGTCT AATTGTGCTA   1620
      GTAGATATAC ACTAGAAGTA AAACTATAAA GTCATTAGCC TGTAGAAAGT TGATTATGAT   1680
      AACAATATGA TAAAAAGTTT GTTTTGGAAT AGTCTCAGCT AGATGGGTCT AAATAGCCAT   1740
30    TTTAATGTAA TCTAAAAATA ACACTATGCC TAGCAGAAAC TTTGGCGCTT TGGAGGTCCC   1800
      CATTGTCGCC TTTTCATAAA AGTCCTTAAG TTTTCCTATAT GTCACCAAGC AAACATTTGT   1860
      ATAGGCATTT ACACAGAAAT ATAACCATTG CAATTAGAAA ATATCCAAAA TAGCCTGTTA   1920
      TCTTCCACGT GGCCTAGATT ATTGACAATC CCAAATATAC AATTTTTCTT TAAAAGTAGT   1980
      ACAATTTCCT TTGTAGCTTC AATTCCTTAT ATGACTTCAG ACTGGAGAAG CCTGTTAAAC   2040
35    CACTGTTAGT TTCAGTTAGA AAGTCTGAGA GACTTTATAC ATAAAATTCTC AATTTGGCTG   2100
      CTGTACACGT GCCAGAGTTT TACTACTGTA GTGACCGTTG AGAAGACCCT TGTTTATTTA   2160
      CATTTGAAGC ACTGTTTGTG CAAACAACCT TTCATTGTTA AGTGCCTGTA TTCCTTTCAT   2220
      TTACTTCATG TCCAGGGGTG CTATTTACCT AGAACCATTG TCTACTACAA TTAACATTTA   2280
      CATTACAAAG TGTGTGGTTT TCTTTTTCAA GGAGGTTCAA TTAAGGCAAT AAGATGTTTG   2340
40    CTGGAGAAAC CTATTGTTTA CTGAAAGCAC TCAATGAAGT CAAATTACTG AAGCTTTTGC   2400
      CTACATCTTG GTCTTTTATG TAAATATGTT AAATATAACA TCTAAGGAAA ATAAACAATA   2460
      TTATAATTAT GTGTTTGCCA TTGTCATATC AAACTTGCTT TGTATCATAC TAATGTTACA   2520
      TAACTTATCG ATCAATAAAA ATACATTTCA ATGTT
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Seq ID NO: 253 DNA sequence
Nucleic Acid Accession #: NM_001650.2
Coding sequence: 40.1011

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      1          11         21         31         41         51
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      GGGGCAGGCA ATGAGAGCTG CACTCTGGCT GGGGAAGGCA TGAGTGACAG ACCCACAGCA     60
      AGGCGGTGGG GTAAGTGTGG ACCTTTGTGT ACCAGAGAGA ACATCATGGT GGCTTTCAAA    120
      GGGGTCTGGA CTCAAGCTTT CTGGAAAGCA GTCACAGCGG AATTTCTGGC CATGCTTATT    180
      TTTGTTCTCC TCAGCCTGGG ATCCACCATC AACTGGGGTG GAACAGAAAA GCCTTTACCG    240
55    GTCGACATGG TTCTCATCTC CCTTTGCTTT GGACTCAGCA TTGCAACCAT GGTGCAGTGC    300
      TTTGGCCATA TCAGCGGTGG CCACATCAAC CCTGCAGTGA CTGTGGCCAT GGTGTGCACC    360
      AGGAAGATCA GCATCGCCAA GTCTGTCTTC TACATCGCAG CCCAGTGCCT GGGGGCCATC    420
      ATTGGAGCAG GAATCCTCTA TCTGGTCACA CCTCCCAGTG TGGTGGGAGG CCTGGGAGTC    480
      ACCATGGTTC ATGGAAATCT TACCGCTGGT CATGGTCTCC TGGTTGAGTT GATAATCACA    540
60    TTTCAATTGG TGTTTACTAT CTTTGCCAGC TGTGATTCCA AACGGACTGA TGTCACTGGC    600
      TCAATAGCTT TAGCAATTGG ATTTTCTGTT GCAATGGAC ATTTATTTGC AATCAATTAT    660
      ACTGGTGCCA GCATGAATCC CGCCCGATCC TTTGGACCTG CAGTTATCAT GGGAAATTGG    720
      GAAAACCATT GGATATATTG GGTTGGGCCC ATCATAGGAG CTGTCCTCGC TGGTGGCCTT    780
      TATGAGTATG TCTTCTGTCC AGATGTTGAA TTCAAACGTC GTTTTAAAGA AGCCTTCAGC    840
65    AAAGCTGCCC AGCAAACAAA AGGAAGCTAC ATGGAGGTGG AGGACAACAG GAGTCAGGTA    900
      GAGACGGATG ACCTGATTCT AAAACCTGGA GTGGTGCATG TGATTGACGT TGACCGGGGA    960
      GAGGAGAAGA AGGGGAAAGA CCAATCTGGA GAGGTATTGT CTTCAGTATG ACTAGAAGAT   1020
      CGCACTGAAA GCAGACAAGA CTCCTTAGAA CTGTCCTCAG ATTTCCTTCC ACCCATTAAG   1080
      GAAACAGATT TGTTATAAAT TAGAAATGTG CAGGTTTGTT GTTTCATGTC ATATTACTCA   1140
70    GTCTAAACAA TAAATATTTC ATAATTTACA AAGGAGGAAC GGAAGAAACC TATTGTGAAT   1200
      TCCAAATCTA AAAAAAGAAA TATTTTTAAG ATGTTCTTAA GCAAATATAT ACCTATTTTA   1260
      TCTAGTTACC TTTCATTAAC AACCAATTTT AACCGTGTGT CAAGATTTGG TTAAGTCTTG   1320
      CCTGACAGAA CTCAAAGACA CGTCTATCAG CTTATTCCTT CTCTACTGGA ATATTGGTAT   1380
      AGTCAATTCT TATTTGAATA TTTATTCTAT TAAACTGAGT TTAACAATGG C·
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Seq ID NO: 254 Protein sequence
Protein Accession #: NP_001641.1

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      1          11         21         31         41         51
      |          |          |          |          |          |
      MSDRPTARRW GKCGPLCTRE NIMVAPKGVW TQAFWKAVTA EFLAMLIFVL LSLGSTINWG     60
      GTEKPLPVDM VLISLCFGLS IATMVQCFGH ISGGHINPAV TVAMVCTRKI SIAKSVFYIA    120
      AQCLGAIIGA GILYLVTPPS VVGGLGVTMV HGNLTAGHGL LVELIITFQL VFTIFASCDS    180
      KRTDVTGSIA LAIGFSVAIG HLFAINYTGA SMNPARSFGP AVIMGNWENH WIYWGPIIG    240
      AVLAGGLYEY VFCPDVEFKR RFKEAFSKAA QQTKGSYMEV EDNRSQVETD DLILKPGVVH    300
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1049

VIDVDRGEEK KGKDQSGEVL SSV

Seq ID NO: 255 DNA sequence
Nucleic Acid Accession #: U26742.1
Coding sequence: 325..1449

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1          11         21         31         41         51
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CAGGAAACCC TGGTACTGGC AGCAGCCAGC CTCTGCTGTG CCCACATGAC CCACAACTCT    60
GGCAGCGGAC CCGGCACTTC CAACATTATT AAATAATAAG AAAGCGGCTC CTACTCCAGG   120
CTCAAACCTC CCTGCAGACC AATGGACACC TTCTAAGAGT TTGGCGAGTC AGTGACTGAA   180
GCGCCCGTCC ATTCCAAGAT AAATAGGATT TACCAATCCT TGGATGAAGT GCTTGGGAAG   240
TCTTTAAGTG CCATAATCAA CTGCCATTTC AAAGAATATA GATGGTTTTG AAAAGTTCAT   300
GCTGTCCCTT CATTGAATTT TAGAATGATT GAAGATAGTG GGAAAGAGG  AAATACCATG   360
GCAGAAAGAA GACAGCTGTT TGCAGAGATG AGGGCTCAAG ATCTGGATCG CATCCGACTC   420
TCCACCTACA GAACAGCATG CAAGCTTAGG TTTGTTCAGA AGAAATGCAA TTTGCACCTG   480
GTGGACATAT GGAATGTCAT AGAAGCATTG CGGGAAAATG CTCTGAACAA CCTGGACCCA   540
AACACTGAAC TCAACGTGTC CCGCTTAGAG GCTGTGCTCT CCACTATTTT TTACCAGCTC   600
AACAAACGGA TGCCAACCAC TCACCAAATC CATGTGGAGC AGTCCATCAG CCTCCTCCTT   660
AACTTCCTGC TTGCAGCGTT TGATCCGGAA GGCCATGGTA AAATTTCAGT ATTTGCTGTC   720
AAAATGGCTT TAGCCACATT GTGTGGAGGG AAGATCATGG ACAAATTAAG ATATATTTTC   780
TCAATGATTT CTGACTCCAG TGGGGTGATG GTTTATGGAC GATATGACCA ATTCCTTCGG   840
GAAGTTCTCA AACTACCCAC GGCAGTTTTT GAAGGTCCTT CATTTGGTTA CACAGAACAG   900
TCAGCCAGAT CCTGTTTCTC CCAACAGAAA AAAGTCACGT TAAATGGTTT CTTGGACACG  960
CTTATGTCAG ATCCTCCCCC GCAGTGTCTG GTCTGGTTGC CTCTTCTGCA TCGACTAGCA  1020
AATGTGGAAA ATGTCTTCCA TCCGGTTGAG TGTTCCTACT GCCACAGTGA GAGTATGATG  1080
GGATTTCGCT ACCGATGCCA ACAGTGTCAC AATTACCAGC TCTGTCAGGA CTGCTTCTGG  1140
AGGGGACATG CCGGTGGTTC TCATAGCAAC CAGCACCAAA TGAAAGAGTA CACGTCATGG  1200
AAATCACCTG CTAAGAAGCT GACTAATGCA TTAAGCAAGT CCCTGAGCTG TGCTTCCAGC  1260
CGTGAACCTT TGCACCCCAT GTTCCCCAGAT CAGCCTGAGA AGCCACTCAA CTTGGCTCAC  1320
ATCGTTGATA CTTGGCCTCC CAGACCTGTA ACCAGCATGA ACGACACCCT GTTCTCCCAC  1380
TCTGTTCCCT CCTCAGGAAG TCCTTTTATT ACCAGGAGCT CGGACGGTGC TTTTGGTGGA  1440
TGCGTCTAGA TGGATAACAT GACTTCTTCT ACCCTAAAAT ATTCCTATAA TACTTTGAGC  1500
TGTTCTGGTT CCTCCAGGGT GCATGGTACC CATTAACCCA AAATATGATT ATTTCCCTTT  1560
TTTCCCATTT TCAGTCATTT TGGAATGTTC TCTGTGAACC ACAGTTGGGT TGTTTAAAGC  1620
TCACATTTCT TTCTGTCACC ACAGAGATTG GCCTACGGTT TCTGTTTTGA GGGTGCTGTT  1680
CAATAAAGCT GTGTACACTA AATGTCC
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Seq ID NO: 256 Protein sequence
Protein Accession #: AAC50424.1

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1          11         21         31         41         51
|          |          |          |          |          |
MIEDSGKRGN TMAERRQLFA EMRAQDLDRI RLSTYRTACK LRFVQKKCNL HLVDIWNVIE    60
ALRENALNNL DPNTELNVSR LEAVLSTIFY QLNKRMPTTH QIHVEQSISL LLNFLLAAFD   120
PEGHGKISVF AVKMALATLC GGKIMDKLRY IFSMISDSSG VMVYGRYDQF LREVLKLPTA   180
VFEGPSFGYT EQSARSCFSQ QKKVTLNGFL DTLMSDPPPQ CLVWLPLLHR LANVENVFHP   240
VECSYCHSES MMGFRYRCQQ CHNYQLCQDC FWRGHAGGSH SNQHQMKEYT SWKSPAKKLT   300
NALSKSLSCA SSREPLHPMF PDQPEKPLNL AHIVDTWPPR PVTSMNDTLF SHSVPSSGSP   360
FITRSSDGAF GGCV
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Seq ID NO: 257 DNA sequence
Nucleic Acid Accession #: NM_004172.1
Coding sequence: 179..1807

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1          11         21         31         41         51
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GCGGATTGTT GCTCCGTTGT ACCTGCTGGG GAATTCACCT CGTTACTGCT TGATATCTTC    60
CACCCCTTAC AAAATCAGAA AAGTTGTGTT TTCTAATACC AAAGAGGAGG TTTGGCTTTC   120
TGTGGGTGAT TCCCAGACAC TGAAGTGCAA AGAAGAGACC CTCCTAGAAA AGTAAAATAT   180
GACTAAAAGC AATGGAGAAG AGCCCAAGAT GGGGGGCAGG ATGGAGAGAT TCCAGCAGGG   240
AGTCCGTAAA CGCACACTTT TGGCCAAGAA GAAAGTGCAG AACATTACAA AGGAGGATGT   300
TAAAAGTTAC CTGTTTCGGA ATGCTTTTGT GCTGCTCACA GTCACCGCTG TCATTGTGGG   360
TACAATCCTT GGATTTACCC TCCGACCATA CAGAATGAGC TACCGGGAAG TCAAGTACTT   420
CTCCTTTCCT GGGGAACTTC TGATGAGGAT GTTACAGATG CTGGTCTTAC CACTTATCAT   480
CTCCAGTCTT GTCACAGGAA TGGCGGCGCT AGATAGTAAG GCATCAGGGA AGATGGGAAT   540
GCGAGCTGTA GTCTATTATA TGACTACCAC CATCATTGCT GTGGTGATTG GCATAATCAT   600
TGTCATCATC ATCCATCCTG GGAAGGGCAC AAAGGAAAAC ATGCACAGAG AAGGCAAAAT   660
TGTACGAGTG ACAGCTGCAG ATGCCTTCCT GGACTTGATC AGGAACATGT TCCCTCCAAA   720
TCTGGTAGAA GCCTGCTTTA AACAGTTTAA AACCAACTAT GAGAAGAGAA GCTTTAAAGT   780
GCCCATCCAG GCCAACGAAA CGCTTGTGGG TGCTGTGATA AACAATGTGT CTGAGGCCAT   840
GGAGACTCTT ACCCGAATCA CAGAGGAGCT GGTCCCAGTT CCAGGATCTG TGAATGGAGT   900
CAATGCCCTG GGTCTAGTTG TCTTCTCCAT GTGCTTCGGT TTTGTGATTG AAACATGAA   960
GGAACAGGGG CAGGCCCTGA GAGAGTTCTT TGATTCTCTT AACGAAGGCCA TCATGAGACT  1020
GGTAGCAGTA ATAATGTTGGT ATGCCCCCGT GGGTATTCTC TTCCTGATTG CTGGGAAGAT  1080
TGTGGAGATG GAAGACATGG GTGTGATTGG GGGGCAGCTT GCCATGTACA CCGTGACTGT  1140
CATTGTTGGC TTACTCATTC ACGCAGTCAT CGTCTTGCCA CTCCTCTACT TCTTGGTAAC  1200
ACGGAAAAAC CCTTGGGTTT TTATTGGAGG GTTGCTGCAA GCACTCATCA CCGCTCTGGG  1260
GACCTCTTCA AGTTCTGCCA CCCTACCCAT CACCTTCAAG TGCCTGGAAG AGAACAATGG  1320
CGTGGACAAG CGCGTCACCA GATTCGTGCT CCCCGTAGGA GCCACCATTA ACATGGATGG  1380
GACTGCCCTC TATGAGGCTT GGGCTGCCAT TTTCATTGCT CAAGTTAACA ACTTTGAACT  1440
GAACTTCGGA CAAATTATTA CAATCAGCAT CACAGCCACA GCTGCCAGTA TTGGGGCAGC  1500
TGGAATTCCT CAGGCGGGCC TGGTCACTAT GGTCATTGTG CTGACATCTG TCGGCCTGCC  1560
CACTGACGAC ATCACGCTCA TCATCGCGGT GGACTGGTTC CTGGATCGCC TCCGGACCAC  1620
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CACCAACGTA CTGGGAGACT CCCTGGGAGC TGGGATTGTG GAGCACTTGT CACGACATGA  1680
ACTGAAGAAC AGAGATGTTG AAATGGGTAA CTCAGTGATT GAAGAGAATG AAATGAAGAA  1740
ACCATATCAA CTGATTGCAC AGGACAATGA AACTGAGAAA CCCATCGACA GTGAAACCAA  1800
GATGTAGACT AACATAAAGA AACACTTTCT TGAGCACCAG GTGTTAAAAA CCATTATAAA  1860
ATCTTTCCAT CTCATTACAG CTCATTCGCT CCAGCAAGCC CGTCATCTTC CCTTTCCTCC  1920
CTTCTGATAA GACTGGAAAA TAGTCCTCCA AAACACAAGG GAGGATTTTG GGTGGCCAAA  1980
GTGTACAATT TTCATCCCAC AATTGAAATT TTTAAATCAT TTCATGTTAG TCTTACCGAA  2040
TAAGGTACCA AGATCACAAA TAGTGTTGAT CAGATCTTAC AAGTTTATGT GGCACACAAT  2100
TCCTATAAAT GTGATTTTTT TATATAAGTT AAAGAGACAA ATAGTAGGCT AAAAACATTT  2160
TAAAATCAAC TTTTGAAATT TAAAAATCTT TCAGAATACA ATTCAGTTTT AGTTTCAAAA  2220
TGTTAACAAC TTGAATTACA ACCGGTTATC AGTTGGACAG TAAGATTTTA TCCCTTTCTC  2280
TTCTGACTGG TATACCTATT TCATTAGTAG CTAGGTGCAC ATATACATCT AGCACAGCTG  2340
TGAGGACAGA CAGAAGGCAA AGTTTCCATG TGGCCTTGAG CAAGTCCCAT CTCACCTCTA  2400
GGCCTCAGTG TCCTCATCTA TAAAATGAGG GACTTCCCTA GAAGTCTTCA TGGTCTCTTC  2460
CAGCCCAGAC ATCCTGTGAT GTCATGAAAG CACCTGCCCT CTGTTTCCCC TCAGAACACC  2520
CTGTACCATC CATGGAGCAC GAGGCCTTCA GAAAAGACAC TTCAATGGGA GTGAACATTT  2580
CTAACTAAGG ACAGGATGGC TGTGTGTGGT GGTCACCAGG TCCTGTGAGC AAAGTGCAGG  2640
TTATGCAAGT CGCCAGGCAG GAGGCCATTC CAGGAGTGGG ATTATTCATC AAACTCTTTG  2700
CCCAGTTCAT CCCAATGGGG GAAGTATTCC CTTCTTTCCT ACTCTGGGAA GAATGTCTCC  2760
TGCCCACTCCT CAACTGATGA TAGACTTCGA AAACAGATGA GAAGACTAGC AGCTAGCAAG  2820
GGTGCTTGTA GTCACACTGT GGAACACTAA AGAGCTAGGA AAGAGTTGAG CACAGGCAAC  2880
ATTACAAACA AAGGATTTGA AAACACCAAG AGTACAGGTC TTCTTTAAGG AAGAATAAAA  2940
AAGAAGAGGT TCATTTTTCT GGCTTTTTTT TTCACCTGAA ACACTTTTTC TCGAGTCCAA  3000
AATCATTCCC CCCGTGAAGT CTGCTTACCA AAACATAAGA CGACTTATAT ATTTGAAAGA  3060
AGTCAAATGA ATGAGCTCTC TAATAGAAGT CCATGAGTTG AGTGGGTATT TCTTATTTGA  3120
AAGTGTTTTT CTTTAATCAA AAGTCCTTAG AATGAGGGAA ACAAAATATT TATTTGTTTT  3180
GGAATCCCAC TTATCAAATC ATTCAAAACT TTCAGCTGGA GTGGGGTTTG CTTTTGTTTT  3240
GTTTGTGTCC ATAAGAGAAA TGGTAGAAGA TGAATCAGTA TGAAGACACT GTCAATGAGG  3300
TTATGAGAAA AAAACAGCAG GGGCATTAGT TTCAGGCAAG GCAGCTCCCA GGTTTAGAGA  3360
TTAATTTTTA CCCCCTAAGG AATATCCAGT CAAAGACGCT GAGTGGGAGC TGTCAGGCAG  3420
TAGCAGCTGT GTTTGAGTTT CTGGCTGAAA ATGGTGAAGA ATGGACTTAA TTATGCTAAC  3480
AAACTGAAAA ATCTAGACAT AGATCCTCTG ATATACAATT AGAGATATTT TTATATAGAC  3540
CCCAAGCATT CTGTGCATAA AAGTTAACAA TAGGCTGTGG TGCAGTAACC ATTTAATGTC  3600
GAGGCTCTAT TTCGGAAATA CACTACAAAT GTTAAAGTAC GTGGCTGTCC TCTTAAGACA  3660
CTAGTAGAGC AAAGACTTAA TCATATCAAC TTAATTCTGT TACACAATAT GTGTTTTTTA  3720
ATATACTAAC CATTTCTTAT GGAAAGGTCC TGTGGGGAGC CCATCCTCTC GCCAAGCCAT  3780
CACAGGCTCT GCATACACAT GCACTCAGTG TGGACTGGGA AGCATTACTT TGTAGATGTA  3840
TTTTCAATAA AGAAAAAAAT AGTTTTACAT T
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Seq ID NO: 258 Protein sequence
Protein Accession #: NP_004163.1

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1          11         21         31         41         51
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MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV   60
GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG  120
MRAVVYYMTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP  180
NLVEACFKQP KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG  240
VNALGLVVFS MCFGFVIGNM KEQGQALREF PDSLNEAIMR LVAVIMWYAP VGILFLIAGK  300
IVEMEDMGVI GGQLAMYTVT VIVGLLIHAV IVLPLLYFLV TRKNPWVFIG GLIQALITAL  360
GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPVGATINMD GTALYEALAA IPIAQVNNFE  420
LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT  480
TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET  540
KM
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Seq ID NO: 259 DNA sequence
Nucleic Acid Accession #: NM_021948.1
Coding sequence: 48..2783

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TCCTGCCCCT GCTGGCAGCC CTGGTCCTGG CCCAGGCTCC TGCAGCTTTA GCAGATGTTC  120
TGGAAGGAGA CAGCTCAGAG GACCGCGCTT TTCGCGTGCG CATCGCGGGC GACGCGCCAC  180
TGCAGGGCGT GCTCGGCGGC GCCCTCACCA TCCCTTGCCA CGTCCACTAC CTGCGGCCAC  240
CGCCGAGCCG CCGGGCTGTG CTGGGCTCTC CGCGGGTCAA GTGGACTTTC CTGTCCCGGG  300
GCCGGGAGGC AGAGGTGCTG GTGGCGCGGG GAGTGCGCGT CAAGGTGAAC GAGGCCTACC  360
GGTTCCGCGT GGCACTGCCT GCGTACCCAG CGTCGCTCAC CGACGTCTCC CTGGCGCTGA  420
GCGAGCTGCG CCCCAACGAC TCAGGTATCT ATCGCTGTGA GGTCCAGCAC GGCATCGATG  480
ACAGCAGCGA CGCTGTGGAG GTCAAGGTCA AAGGGGTCGT CTTTCTCTAC CGAGAGGGCT  540
CTGCCCGCTA TGCTTTCTCC TTTTCTGGGG CCCAGGAGGC CTGTGCCCGC ATTGGAGCCC  600
ACATCGCCAC CCCGGAGCAG CTCTATGCCG CCTACCTTGG GGGCTATGAG CAATGTGATG  660
CTGGCTGGCT GTCGGATCAG ACCGTGAGGT ATCCCATCCA GACCCCACGA GAGGCCTGTT  720
ACGGAGACAT GGATGGCTTC CCCGGGGTCC GGAACTATGG TGTGGTGGAC CCGGATGACC  780
TCTATGATGT GTACTGTTAT GCTGAAGACC TAAATGGAGA ATTGTTCCTG GGTGACCCTC  840
CAGAGAAGCT GACATTGGAG GAAGCACGGG CGTACTGCCA GGAGCGGGGT GCAGAGATTG  900
CCACCACGGG CCAACTGTAT GCAGCCTGGG ATGGTGGCCT GGACCACTGC AGCCCAGGGT  960
GGCTAGCTGA TGGCAGTGTG CGCTACCCCA TCGTCACACC CAGCCAGCGC TGTGGTGGGG  1020
GCTTGCCTGG TGTCAAGACT CTCTTCCTCT TCCCCAACCA GACTGGCTTC CCCAATAAGC  1080
ACAGCCGCTT CAACGTCTAC TGCTTCCGAG ACTCGGCCCA GCCTTCTGCC ATCCCTGAGG  1140
CCTCCAACCC AGCCTCCAAC CCAGCCTCTG ATGGACTAGA GGCTATCGTC ACAGTGACAG  1200
AGACCCTGGA GGAACTGCAG CTGCCTCAGG AAGCCACAGA GAGTGAATCC CGTGGGGCCA  1260
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CAGAGGCCCC TAGGACGCTC CTAGAATTTG AAACACAATC CATGGTACCG CCCACGGGGT  1380
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Seq ID NO: 260 Protein sequence
Protein Accession #: NP_068767.1

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Seq ID NO: 261 DNA sequence
Nucleic Acid Accession #: NM_004386.1
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Seq ID NO: 262 Protein sequence
Protein Accession #: NP_004377.1

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1053

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25   Seq ID NO: 263 DNA sequence
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Seq ID NO: 264 <u>Protein sequence</u>
Protein Accession #: Eos sequence

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MASTRSIELE HFEERDKRPR PGSRRGAPSS SGGSSSSGPK GNGLIPSPAH SAHCSFYRTR   60
TLQALSSEKK AKKARFYRNG DRYFKGLVPA ISSDRFRSFD ALLIELTRSL SDNVNLPQGV  120
RTIYTIDGSR KVTSLDELLE GESYVCASNE PFRKVDYTKN INPNWSVNIK GGTSRALAAA  180
SSVKSEVKES KDFIKPKLVT VIRSGVKPRK AVRILLNKKT AHSFEQVLTD ITEAIKXASG  240
VVKRLCTLDG KQVRVTCVHL PDFFGDDDVF IACGPEKFRY AQDDFVLDHS ECRVLKSSYS  300
RSSAVKYSGS KSPGPSRRSQ ISAHGRSSSN VNGGPELDRC ISPEGVNGNR CSESSTLLEK  360
YKIGKVIGDG NFAVVKECID RSTGKEFALK IIDKAKCCGK EHLIENEVSI LRRVKHPNII  420
MLVEEMETAT ELFLVMELVK GGDLFDAITS STKYTERDGS AMVYNLANAL RYLHGLSIVH  480
RDIKPENLLV CEYPDGTKSL KLGDFGLATV VEGPLYTVCG TPTYVAPXII AETGYGLKVD  540
IWAAGVITYI LLCGFPPFRS ENNLQEDLFD QILAGKLEFP APYWDNITDS AKELISQMLQ  600
VNVEARCTAG QILSHPWVSD DASQENNMQA EVTGKLKQHF NNALPKQNST TTGVSVIMVS  660
GRRQVWPDCG AGLEVFELGS RELPSHGSWC LP
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Seq ID NO: 265 <u>DNA sequence</u>
Nucleic Acid Accession #: AB020684.1
Coding sequence: 1..1744

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1          11         21         31         41         51
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CCCCCTTGTC ATTAATACAT TAAAAAGATT CAATCTTTAC CCTGAGGTAA TTTTGGCCAG   60
TTGGTACCGG ATTTATACCA AAATAATGGA CTTGATTGGT ATTCAAACCA AGATATGTTG  120
GACGGTTACC AGAGGAGAAG GACTCAGTCC TATTGAAAGC TGTGAAGGAT TGGGAGATCC  180
TGCTTGCTTT TATGTTGCTG TAATTTTTAT TTTAAATGGA CTAATGATGG CATTATTCTT  240
CATATATGGC ACATATTTAA GTGGCAGCCG ATTAGGAGGC CTGGTTACAG TGTTGTGCTT  300
CTTTTTCAAT CATGGAGAGT GTACCCGTGT AATGTGGACA CCACCTCTCC GTGAAAGCTT  360
CTCATATCCA TTTCTTGTTC TTCAGATGTT GCTAGTGACT CATATTCTCA GGGCTACAAA  420
ACTTTATAGA GGAAGCTTGA TTGCACTCTG CATTTCCAAT GTATTTTTCA TGCTTCCTTG  480
GCAGTTTGCT CAGTTTGTAC TTCTTACTCA GATTGCATCA TTATTTGCAG TATATGTTGT  540
CGGGTACATT GATATATGTA AATTACGGAA GATCATTTAT ATACACATGA TTTCTCTTGC  600
ACTTTGTTTT GTTTTGATGT TTGGGAACTC AATGTTATTA ACTTCTTATT ATGCTTCTTC  660
TTTGGTAATT ATTTGGGGTA TTCTGGCAAT GAAACCACAT TTCCTGAAAA TAAATGTATC  720
TGAACTTAGT TTATGGGTTA TTCAAGGATG TTTTTGGTTA TTTGGAACTG TCATACTTAA  780
ATACTTGACA TCTAAAATTT TTGGTATTGC AGATGACGCT CATATTGGCA ACTTACTAAC  840
ATCAAAATTC TTTAGTTATA AGGATTTTGA TACTTTATTG TACACCTGTG CAGCGGAGTT  900
TGACTTTATG GAAAAAGAGA CTCCCACTGAG ATACACAAAG ACATTATTGC TTCCAGTTGT  960
TCTTGTAGTG TTTGTTGCTA TTGTTAGAAA GATTATTAGT GATATGTGGG GTGTCTTAGC 1020
TAAACAACAG ACACATGTAA GAAAACACCA GTTTGATCAT GGAGAGCTGG TTTACCATGC 1080
ATTGCAATTG TTAGCATATA CAGCCCTTGG TATTTTAATT ATGAGACTAA AACTCTTCTT 1140
GACACCACAC ATGTGTGTTA TGGCATCACT GATCTGCTCA AGACAGCTAT TTGGATGGCT 1200
CTTTTGCAAA GTACATCCTG GTGCTATTGT GTTTGCTATA TTAGCAGCAA TGTCAATACA 1260
AGGTTCAGCA AATCTGCAAA CCCAGTGGAA TATTGTAGGG GAGTTCAGCA ATTTGCCCCA 1320
AGAAGAACTT ATAGAATGGA TCAAATATAG TACTAAACCA GATGCAGTGT TTGCGGGTGC 1380
CATGCCCACG ATGGCAAGTG TTAAGCTCTC TGCACTTCGG CCCATTGTGA ATCATCCACA 1440
TTATGAAGAC GCAGGCTTGA GAGCCAGAAC AAAAATAGTA TACTCAATGT ATAGTCGGAA 1500
AGCAGCCGAA GAAGTGAAGC GAGAACTGAT AAAGTTAAAA GTGAACTATT ACATTCTAGA 1560
AGAGTCATGG TGTGTAAGAA GATCCAAGCC TGGTTGCAGT ATGCCTGAAA TTTGGGATGT 1620
AGAAGATCCT GCCAATGCTG GGAAAACTCC CTTATGTAAC CTCTTGGTGA AGGATTCCAA 1680
ACCTCACTTC ACCACTGTAT TCCAGAACAG TGTTTACAAA GTCCTAGAGG TTGTAAAAGA 1740
ATGACTGCTA CATGACCTGC TGCCTACGGA GAACTACATC TGTAATGGTT TTAATGTTTT 1800
GCTAAGTCAT GTGTTGTTCA TATCCCAAAA ACTTTTATAG GTAACTGTTT TCAAATAGAA 1860
AACGTTTTAT TTGGTCAATT TGAATGTCAT TCTAATTATA AAAATGACTT ACACCTTTAT 1920
CAATTGGTTA CTATTTCAAT GCACCCTTTA AAATTTGCTA TGCAAATGAG TATATGCTTG 1980
TACTTGACTT TAATATTTGT GCTAAAGTGA GCAAAGCTAC CTGTATAAAG AAAACACAGT 2040
GGGTTGTGAC AAGGATGACA TGAAAATACA GGACAATTCT GACAATGTAG GGGCTGATTT 2100
TATAGTGTAA GAACTATTAA TGCCCCTTGC TTCTTTTTTC TGCCTCTTGC TCTTGTCTTT 2160
TGGACATTTC AGTGATTGTA AGTTCTTCGG TCATGTCAGC CCCTGTCATC AACTTGAGTT 2220
ACAGTAGATG GGGCAGACAT GGAGTGTTTG CTATATAAAA CTATCTGTTT GTTTTACTTC 2280
CTTGTGCGCT TTTTGTTCTC TGTTCTCTTG TTAATGAAGC TTTTCCTGCC CATTATTAAT 2340
CCAAACTCTT GGACCTTGTG GTTAGGAAAT TCCCTTAACT TCCAGCCATA TGGCATTATC 2400
GTGTCTCTTT CTCTCTCTCT CTTGCTCTCT CTCTTCTCCT CTTCCCCATA TTTTCTGTCA 2460
AATAAGTACT GTTTACTCAT TTAGTTGCTT ATCAAGTACT TATTCTTGGT TTTAAAAAAA 2520
ATTAATGGTA ACTGTATTTT TCTCATTTTT AGCATTATTC AAATGTTTAT ATTTTAATAC 2580
CTTTAAACCA CTTTAAAGTT TTTTCATGTT TAATTATAGT TTTAAGAAAA ACTATTTTGA 2640
ACAACCCCAA ATATAGTGCA TCTAGAAACT AATGTATATT TGATTAGACA TCATTTATAG 2700
TGGAACAGTA GACTGTAGTA CATGGTAATT TTTCTTTTAC TATTAAGATA CAATAAAACA 2760
TGACTAATTT TGCTGTCAAA AATGTAAAGA ATAATGATAA ATGGAGTTTT TTATATTTTA 2820
CTTTTAAGAT TGCCTGTCTT TAATAAGACA AAGCCTTAAG CCTTATGTTA TAATTTTGGT 2880
TCTAAAAACC ATCATTTCAG TATAAGGAAT AAGTATATTT CGTCCTCCTC TTTAGTTTTT 2940
TTCTTCCTAT TTATTTTTAT TTTGAAAAAT TTCTACACCT TCTTTGAATT CCTTGTATGA 3000
ATTTTTGTTT CTTAGAAGTT AATTTGTGTG AAATGAGATT CTTCAAAACG ATGAAACCTC 3060
ATAGCTCTGA GAAAAGGTTT TAGGGTTTTA AATTCTAAGC AAAGCGTGAC TATGGCTGAC 3120
AGACTACACA TTTAATTATA CAGCTTCTCT TTCTTAACCA CAGGCAGATT AACCTCATTG 3180
TGGATTGTCC TTCAGACCTT AGTCCTCAGG CATGGTTTCT GGTGCCCACT CCTGGAAGCC 3240
GCTGTTCCCT TTCTACCTTC TTACCAGAGC CCAAGGGCAG GCCTGGTCCC GGGGAAGCAG 3300
CAGCTGCTG ACATAAGTCA GCTGCAAAGG CTGAGGAGTG TGCCCTCAGA GGCACCGGC 3360
CCCCCAGTCT TGTGCCAGCG CCTAGAGCCG CAGCTCCCAG GGATGCTCCT TCCCTGGAGG 3420
CAGCCCAGGA GAGGGACTCT GGCAGCGTTC TTCAGATTTG TGGCCACTGT TTCTCATTTG 3480
CTGGTTGACT GTTTTTATTT CTTAGGCTTT TGCTAGTTTT AGAAAATAGG GAAGCAGCCC 3540
TTGATTTGTG GATTAAAAGC AACATTTGAG CGATGATGCA CAACAGTCCA GGAAAATGGG 3600
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CGGTGGACAC TTGAGGCTGA GGATGGGAGT TGACATGAGC AGGGAGAGGG AGGTGCGCGC   3660
TGCTTATCTG TGATTGTTGC TCACCTGAGT GTGGCTGATT GTGTACATCC AGCAGTTACA   3720
ATTTTTAAAA ATTATACTTT TACATTTATT TTATATTTTT CTCACCCCCA GTAATTTCCT   3780
TCCAAAGAAG TTCACATGTA ATAAGTAGAA ATTCTGTATA GGAAAAAAGC ATTAAAAATA   3840
CTATTATAAC TGCTTCATTT GCTGGGAACC ATTAAAAGTA ATATAAAATTA GCTTTTTCCA   3900
GAAGGATCCT TTTGTAGCAG TGTTTATGAA TGTAACCCCC AGCAAAATAT GGCTATATAT   3960
TAGGGGAGCC AGTTTGGAGC AGAGGCCTGA AGGTCCCTGC TATGCAGCCG TGGCCACAGC   4020
TCGCAGCCCA AGCACTGTGG AGCATCCACA CCTTTGATGG CAATGCAGAT TGGTAGCAGG   4080
TTCCATAGGC GTACAAAACA GTATTAAAGC TCAGTGTTTT GCATATTGTT AGCATTTACA   4140
AATATTTTTG CTTTAGTATG AGGAAAGTAA GGATGGGCAA AGAAGCGATC AAAATAGCTA   4200
TTGCTACAC ATTTTCGAAA ACAAAGTTGG GGCTGTATTT CTTTAAAAAG ATAAGCCTCT   4260
AAAAATGCTT GGCAAAAAAA ATATAGTGTT AAAATAGGCC AGTGATATTA ATGAGAAAAT   4320
GAAAGTATGT ATCAGGAATA AAGTGATATT GCATAGGAGT ATTGTATTTT TATGAATTTT   4380
ATGCCAGTTG TTTACATGTA CTATATATGT TAAATTAAAA AAAATCATGA GAAATG
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Seq ID NO: 266 <u>Protein sequence</u>
Protein Accession #: BAA74900.1

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1          11         21         31         41         51
|          |          |          |          |          |
PLVINTLKRP NLYPEVILAS WYRIYTKIMD LIGIQTKICW TVTRGEGLSP IESCEGLGDP    60
ACFYVAVIFI LNGLMMALFP IYGTYLSGSR LGGLVTVLCF FFNHGECTRV MWTPPLRESF   120
SYPFLVLQML LVTHILRATK LYRGSLIALC ISNVPFMLPW QFAQPVLLTQ IASLFAVYVV   180
GYIDICKLRK IIYIHMISLA LCFVLMFGNS MLLTSYYASS LVIIWGILAM KPHFLKINVS   240
ELSLWVIQGC FWLFGTVILK YLTSKIFGIA DDAHIGNLLT SKFFSYKDFD TLLYTCAAEF   300
DFMEKETPLR YTKTLLLPVV LVVFVAIVRK IISDMWGVLA KQQTHVRKHQ FDHGELVYHA   360
LQLLAYTALG ILIMRLKLFL TPHMCVMASL ICSRQLFGWL FCKVHPGAIV PAILAAMSIQ   420
GSANLQTQWN IVGEFSNLPQ EELIEWIKYS TKPDAVFAGA MPTMASVKLS ALRPIVNHPH   480
YEDAGLRART KIVYSMYSRK AAEEVKRELI KLKVNYYILE ESWCVRRSKP GCSMPEIWDV   540
EDPANAGKTP LCNLLVKDSK PHFTTVFQNS VYKVLEVVKE
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Seq ID NO: 267 <u>DNA sequence</u>
Nucleic Acid Accession #: U26744.1
Coding sequence: 59..1600

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1          11         21         31         41         51
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GATGAGGGCT CAAGATCTGG ATCGCATCCG ACTCTCCACC TACAGAACAG CATGCAAGCT   180
TAGGTTTGTT CAGAAGAAAT GCAATTTGCA CCTGGTGGAC ATATGGAATG TCATAGAAGC   240
ATTGCGGGAA AATGCTCTGA ACAACCTGGA CCCAAACACT GAACTCAACG TGTCCCGCTT   300
AGAGGCTGTG CTCTCCACTA TTTTTTACCA GCTCAACAAA CGGATGCCAA CCACTCACCA   360
AATCCATGTG GAGCAGTCCA TCAGCCTCCT CCTTAACTTC CTGCTTGCAG CGTTTGATCC   420
GGAAGGCCAT GGTAAAATTT CAGTATTTGC TGTCAAAATG GCTTTAGCCA CATTGTGTGG   480
AGGGAAGATC ATGGACAAAT TAAGATATAT TTTCTCAATG ATTTCTGACT CCAGTGGGGT   540
GATGGTTTAT GGACGATATG ACCAATTCCT TCGGGAAGTT CTCAAACTAC CCACGGAAGT   600
TTTGGAGGGT CCTTCATTTG GTTACACAGA ACAGTCAGCC AGATCCTGTT TCTCCCAACA   660
GAAAAAAGTC ACGTTAAATG GTTTCTTGGA CACGCTTATG TCAGATCCTC CCCCGCAGTG   720
TCTGGTCTGG TTGCCTCTTC TGCATCGACT AGCAAATGTG GAAAATGTCT TCCATCCGGT   780
TGAGTGTTCC TACTGCCACA GTGAGAGTAT GATGGGATTT CGCTACCGAT GCCAACAGTG   840
TCACAATTAC CAGCTCTGTC AGGACTGCTT CTGGAGGGGA CATGCCGGTG GTTCTCATAG   900
CAACCAGCAC CAAATGAAAG AGTACACGTC ATGGAAATCA CCTGCTAAGA AGCTGACTAA   960
TGCATTAAGC AAGTCCCTGA GCTGTGCTTC CAGCCGTGAA CCTTTGCACC CCATGTTCCC  1020
AGATCAGCCT GAGAAGCCAC TCAACTTGGC TCACATCGTT GATACTTGGC CTCCCAGACC  1080
TGTAACCAGC ATGAACGACA CCCTGTTCTC CCACTCTGTT CCCTCCTCAG GAAGTCCTTT  1140
TATTACCAGG AGCATGCTTG AGAGTTCAAA CCGGCTTGAT GAAGAACACA GGCTAATTGC  1200
CAGGTATGCG GCAAGGCTGG CAGCAGAGTC CTCTTCGTCT CAGCCACCTC AGCAGAGAAG  1260
TGCTCCTGAC ATCTCTTTCA CCATCGATGC GAATAAGCAG CAAAGGCAGC TGATTGCTGA  1320
GCTAGAAAAC AAGAACAGAG AAATCTTACA GGAGATCCAG AGACTTCGGC TAGAGCATGA  1380
ACAAGCTTCT CAGCCCCACGC CAGAGAAGGC ACAGCAAAAC CCACCCCTGC TGGCAGAACT  1440
CCGGCTCCTC AGACAGCGCA AAGATGAGCT GGAACAGAGA ATGTCTGCTC TCCAGGAGAG  1500
CCGGAGAGAG CTAATGGTCC AGTTGGAGGG TCTCATGAAG CTACTAAAGG AAGAAGAACT  1560
GAAGCAGGGA GTAAGTTATG TCCCCTACTG CAGGTCTTAA CTAACAGTGG AGGGGCCTGC  1620
CGACCTGCGG TTTTCTCATT GCTTTTGCTC TAATGTATGT TCATGCTTCA GTTTGGAAAG  1680
AGAAAAAAGT CATACTAATT TGCTTCTTTT TCAATGTAGT GCTTGAATTG AGATATATAA  1740
ATTTAGCATT TTTTATAACT ATCACTACTA TCCACATCAA AAGAAGAACT ATGACATCTT  1800
TTAGAAAAGG GAACGAATTG TCATTTATTG GAAACATTTT AGATCCCCAG AGGTATAAGT  1860
TTCAAACCAG TCTTAGCTTT TCAAGTTGTT GATCAGACCC TTCTCTTAAC AGAGAGATAC  1920
CACAGTCACT AGAGATACCC TGAGGTTCAT GTCATCCCAA AACCCACAGC ACTCAGAAGC  1980
TAACCTCTAC ACCCACTCAC ACTGTGAGTA TTCAGTTCGG TTTCATTTTA CTGAAAACCT  2040
GTGAAACCTC TTTTTATAAA AATCAGGCAA TTAAATCCCT TTTCATCACA CAATTATTGA  2100
GCCTTGTTCC CCATGGCTCA CCAAAATGTG CTCAATTTTG TGAGAGAAAG ACTGTACTCC  2160
ATAACTGACT ATTCACGTCC CATCTTTTTG GCTCTTCCCC AAAGCAGAAT CCTTACTGTT  2220
GGTTGACAGT AATCTCTTTT TAAAAAGTAA CTCTCAGCTT TTTCCTTAGC ACCAGAGCCT  2280
TTCGGCTCCG GGAGACGAGA GGGTCATTAC ATACTTTTTT TTTTTTCTGG AAATAGGGGC  2340
ATTGTGACTT TATAGCCTAA ACTGGAGCTG TCTGAACCTG TGGTCAGGCT CAAGAGCCAG  2400
CAGGGGGAGC AGCAAACTC
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Seq ID NO: 268 <u>Protein sequence</u>
Protein Accession #: AAC50426.1

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1          11         21         31         41         51
|          |          |          |          |          |
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MIEDSGKRGN TMAERRQLFA EMRAQDLDRI RLSTYRTACK LRFVQKKCNL HLVDIWNVIE    60
ALRENALNNL DPNTELNVSR LEAVLSTIFY QLNKRMPTTH QIHVEQSISL LLNFLLAAFD   120
PEGHGKISVF AVKMALATLC GGKIMDKLRY IPSMISDSSG VMVYGRYDQF LREVLKLPTE   180
VLEGPSFGYT EQSARSCFSQ QKKVTLNGFL DTLMSDPPPQ CLVWLPLLHR LANVENVFHP   240
VECSYCHSES MMGFRYRCQQ CHNYQLCQDC FWRGHAGGSH SNQHQMKEYT SWKSPAKKLT   300
NALSKSLSCA SSREPLHPMF PDQPEKPLNL AHIVDTWPPR PVTSMNDTLF SHSVPSSGSP   360
FITRSMLESS NRLDEEHRLI ARYAARLAAE SSSSQPPQQR SAPDISFTID ANKQQRQLIA   420
ELENKNREIL QEIQRLRLEH EQASQPTPEK AQQNPTLLAE LRLLRQRKDE LEQRMSALQE   480
SRRELMVQLE GLMKLLKEEE LKQGVSYVPY CRS
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Seq ID NO: 269 DNA sequence
Nucleic Acid Accession #: NM_001276.1
Coding sequence: 127..1278

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1         11        21        31        41        51
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AGTGGAGTGG GACAGGTATA TAAAGGAAGT ACAGGGCCTG GGGAAGAGGC CCTGTCTAGG    60
TAGCTGGCAC CAGGAGCCGT GGGCAAGGGA AGAGGCCACA CCCTGCCCTG CTCTGCTGCA   120
GCCAGAATGG GTGTGAAGGC GTCTCAAACA GGCTTTGTGG TCCTGGTGCT GCTCCAGTGC   180
TGCTCTGCAT ACAAACTGGT CTGCTACTAC ACCAGCTGGT CCCAGTACCG GGAAGGCGAT   240
GGGAGCTGCT TCCCAGATGC CCTTGACCGC TTCCTCTGTA CCCACATCAT CTACAGCTTT   300
GCCAATATAA GCAACGATCA CATCGACACC TGGGAGTGGA ATGATGTGAC GCTCTACGGC   360
ATGCTCAACA CACTCAAGAA CAGGAACCCC AACCTGAAGA CTCTCTTGTC TGTCGGAGGA   420
TGGAACTTTG GGTCTCAAAG ATTTTCCAAG ATAGCCTCCA ACACCCAGAG TCGCCGGACT   480
TTCATCAAGT CAGTACCGCC ATTCCTGCGC ACCCATGGCT TTGATGGGCT GGACCTTGCC   540
TGGCTCTACC CTGGACGGAG AGACAAACAG CATTTTACCA CCCTAATCAA GGAAATGAAG   600
GCCGAATTTA TAAAGGAAGC CCAGCCAGGG AAAAAGCAGC TCCTGCTCAG CGCAGCACTG   660
TCTGCGGGGA AGGTCACCAT TGACAGCAGC TATGACATTG CCAAGATATC CCAACACCTG   720
GATTTCATTA GCATCATGAC CTACGATTTT CATGGAGCCT GGCGTGGGAC CACAGGCCAT   780
CACAGTCCCC TGTTCCGAGG TCAGGAGGAT GCAAGTCCTG ACAGATTCAG CAACACTGAC   840
TATGCTGTGG GGTACATGTT GAGGCTGGGG GCTCCTGCCA GTAAGCTGGT GATGGGCATC   900
CCCACCTTCG GGAGGAGCTT CACTCTGGCT TCTTCTGAGA CTGGTGTTGG AGCCCCAATC   960
TCAGGACCGG GAATTCCAGG CCGGTTCACC AAGGAGGCAG GGACCCTTGC CTACTATGAG  1020
ATCTGTGACT TCCTCCGCGG AGCCACAGTC CATAGAACCC TCGGCCAGCA GGTCCCCTAT  1080
GCCCAAGG GCAACCAGTG GGTAGGGATAC GACGGACCAGG AAAGCGTCAA AAGCAAGGTG  1140
CAGTACCTGA AGGATAGGCA GCTGGCAGGC GCCATGGTAT GGGCCCTGGA CCTGGATGAC  1200
TTCCAGGGCT CCTTCTGCGG CCAGGATCTG CGCTTCCCTC TCACCAATGC CATCAAGGAT  1260
GCACTCGCTG CAACGTAGCC CTCTGTTCTG CACACAGCAC GGGGGCCAAG GATGCCCCGT  1320
CCCCCTCTGG CTCCAGCTGG CCGGGAGCCT GATCACCTGC CCTGCTGAGT CCCAGGCTGA  1380
GCCTCAGTCT CCCTCCCTTG GGGCCTATGC AGAGGTCCAC AACACACAGA TTTGAGCTCA  1440
GCCCTGGTGG GCAGAGAGGT AGGGATGGGG CTGTGGGGAT AGTGAGGCAT CGGCAATGTAA  1500
GACTCGGGAT TAGTACACAC TTGTTGATGA TTAATGGAAA TGTTTACAGA TCCCCAAGCC  1560
TGGCAAGGGA ATTTCTTCAA CTCCCTGCCC CCTAGCCCTC CTTATCAAAG GACACCATTT  1620
TGGCAAGCTC TATCACCAAG GAGCCAAACA TCCTACAAGA CACAGTGACC ATACTAATTA  1680
TACCCCCTGC AAAGCCAGCT TGAAACCTTC ACTTAGGAAC GTAATCGTGT CCCCTATCCT  1740
ACTTCCCCTT CCTAATTCCA CAGCTGCTCA ATAAAGTACA AGAGTTTAAC AGTGTGTTGG  1800
CGCTTTGCTT TGGTCTATCT TTGAGCGCCC ACTAGACCCA CTGGACTCAC CTCCCCCATC  1860
TCTTCTGGGT TCCTTCCTCT GAGCCTTGGG ACCCCTGAGC TTGCAGAGAT GAAGGCCGCC  1920
ATGTT
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Seq ID NO: 270 Protein sequence
Protein Accession #: NP_001267.1

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1         11        21        31        41        51
|         |         |         |         |         |
MGVKASQTGF VVLVLLQCCS AYKLVCYYTS WSQYREGDGS CFPDALDRFL CTHIIYSFAN    60
ISNDHIDTWE WNDVTLYGML NTLKNRNPNL KTLLSVGGWN FGSQRFSKIA SNTQSRRTPI   120
KSVPPFLRTH GFDGLDLAWL YPGRRDKQHF TTLIKEMKAE FIKEAQPGKK QLLLSAALSA   180
GKVTIDSSYD IAKISQHLDF ISIMTYDFHG AWRGTTGHHS PLFRGQEDAS PDRFSNTDYA   240
VGYMLRLGAP ASKLVMGIPT FGRSFTLASS ETGVGAPISG PGIPGRFTKE AGTLAYYEIC   300
DFLRGATVHR TLGQQVPYAT KGNQWVGYDD QESVKSKVQY LKDRQLAGAM VWALDLDDFQ   360
GSFCGQDLRF PLTNAIKDAL AAT
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Seq ID NO: 271 DNA sequence
Nucleic Acid Accession #: NM_006474.1
Coding sequence: 181..669

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1         11        21        31        41        51
|         |         |         |         |         |
GCTGCCTAGG GTCTGGAAAG CTCGGGCACC CTCCCTCTCC GGGGCTCCTG CTCCCACCCC    60
TCCGGCCCCC CCACCGTCGC GCTCCTCCAG GCTGGGCCTG TGGCCGCGGT GCTTTTAATT   120
TTCCCCCAGC TCAGAATCTT GCTGCTCGGC CCCCAGGAGA GCAACAACTC AACGGGAACG   180
ATGTGGAAGG TGTCAGCTCT GCTCTTCGTT TTGGGAAGCG CGTCGCTCTG GGTCCTGGCA   240
GAAGGAGCCA GCACAGGCCA GCCAGAAGAT GACACTGAGA CTACAGGTTT GGAAGGCGGC   300
GTTGCCATGC CAGGTGCCGA AGATGATGTG GTGACTCCAG GAACCAGCGA AGACCGCTAT   360
AAGTCTGGCT TGACAACTCT GGTGGCAACA AGTGTCAACA GTGTAACAGG CATTCGCATC   420
GAGGATCTGC CAACTTCAGA AAGCACAGTC CACGCGCAAG AACAAAGTCC AAGCGCCACA   480
GCCTCAAACG TGGCCACCAG TCACTCCACG GAGAAAGTGG ATGGAGACAC ACAGACAACA   540
GTTGAGAAAG ATGGTTTGTC AACAGTGACC CTGGTTGGAA TCATAGTTGG GGTCTTACTA   600
GCCATCGGTT TCATTGGTGG AATCATCGTT GTGGTTATGC GAAAAATGTC GGGAAGGTAC   660
TCGCCCTAAA GAGCTGAAGG GTTACGCCCT GCTTGCCAAC GTGCTTTAAA AAAAGACCGT   720
TTCTGACTCT GTGGCCCTGT CCCTGAGCTC GTGGGGAGAA GATGACCCTG GGAACATTTG   780
CGGGCCCATT CAGATTCCAC GGTGACTTTC CGTTTGCCAA ATTAACCGAG GAAAGACCTT   840
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TCACCAGATT TGGTTCTTAA ACTTT

Seq ID NO: 272 Protein sequence
Protein Accession #: NP_006465.1

1          11         21         31         41         51
|          |          |          |          |          |
MWKVSALLFV LGSASLWVLA EGASTGQPED DTETTGLEGG VAMPGAEDDV VTPGTSEDRY    60
KSGLTTLVAT SVNSVTGIRI EDLPTSESTV HAQEQSPSAT ASNVATSHST EKVDGDTQTT   120
VEKDGLSTVT LVGIIVGVLL AIGFIGGIIV VVMRKMSGRY SP

Seq ID NO: 273 DNA sequence
Nucleic Acid Accession #: CAT cluster

1          11         21         31         41         51
|          |          |          |          |          |
GCGGCCGCCA GCTTGCAAAG CCGAAGTCTG GCCGCGCTCT TCGACTCGCT GCGCCACGTC    60
CCCGGGGGTG CCGAGCCGGC GGGGGGTGAG GTGGCTGCGC CGGCGGCCGG GCTAGGAGGT   120
GCGGGCACTG GGGGCGCGGG AGGGGACGTG GCAGGCCCCG CGGGGGCCAC GGCGATCCCA   180
GGGGCCAGGA AGGTCCCGCT GCGGGCACGC AATCTGCCTC CGTCCTTCTT CACGGAGCCG   240
TCCCGGGCAG GCGGCCGGCGG GTGTGGCCCG TCGGGGCCGG ACGTGGAGCTT GGGGCGACCTG  300
GAGAAGGGCG CGGAGGCCGT GGAGTTCTTT GAGCTGCTGG GGCCCGACTA CGGGCGCCGGC   360
ACGGAGGCGG CAGTCTTGCT TGCCGCCGAG CCTCTCGACG TGTTCCCCGC GGGAGCCTCC   420
GTACTGCGGG GACCCCCGGA GCTGGAGCCC GGCCTCTTTG AGCCGCCGCC GGCAGTGGTG   480
GGAAACCTAC TGTACCCCGA GCCCTGGAGC GTCCCGGGCT GCTCCCCGAC CAAAAAGAGC   540
CCCTTGACTG CCCTCCGCGG CGGGTTGACC TTGAACGAGC CCTTGAGCCC CCTGTACCCC   600
GCCGCTGCGA ATTTCTCCCG GCGGGGAGGA CGGGCCGGGC CATTTGGCTT CTTTCGCCCC   660
CTTCTTTCCA GACTGCGCTT TGC

Seq ID NO: 274 DNA sequence
Nucleic Acid Accession #: Eos sequence

1          11         21         31         41         51
|          |          |          |          |          |
CAAAGAGGCC GGGCTCCAGC TCCGGGGGTC CCCGCAGTAC GGAGGCTCCG GCGGGGAACA    60
CGTCGAGAGG CTCGGCGGCA AGCAAGACTG CCGCCTCCGT GCCGGCGCCG TAGTCGGGCC   120
CCAGCAGCTC AAAGAACTCC ACGGCCTCCG CGCCCTTCTC CAGGTCGCCC AAGCTCACGT   180
CCGGCCCCGA CGGGCCACAC CCGCCGCCGC CTGCCCGGGA CGGCTCCGTG AAGAAGGACG   240
GAGGCAGATT GCGTGCCCGC AGCGGGACCT TCCTGGCCCC TGGGATCGCC GTGGCCCCCG   300
CGGGGGCCTGC CACGTCCCCT CCCGCGCCCC CAGTGCCCGC ACCTCCTAGC CCGGCCGCCG   360
GCGCAGCCAC CTCACCCCCC GCCGGCTCGG CACCCCCGGG GACGTGGCGC AGCGAGTCGA   420
AGAGCGCGGC CAGACTTCGG CTTTGCAAGC TGGCGGCCGC

Seq ID NO: 275 DNA sequence
Nucleic Acid Accession #: NM_001118.1
Coding sequence: 74..1651

1          11         21         31         41         51
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AGCCCAGAGA CACATTGGGG CTGACCTGCC GCTGCTGTCA GTGGGAGGCC AGTGGTGCTG    60
GCCAAGAAGT GTCATGGCTG GTGTCGTGCA CGTTTCCCTG GCTGCTCACT GCGGGGCCTG   120
TCCGTGGGGC CGGGGCAGAC TCCGCAAAGG ACGCGCAGCC TGCAAGTCCG CGGCCCAGAG   180
ACACATTGGG GCTGACCTGC CGCTGCTGTC AGTGGGAGGC CAGTGGTGCT GGCCAAGAAG   240
TGTCATGGCT GGTGTCGTGC ACGTTTCCCT GGCTGCTCTC CTCCTGCTGC CTATGGCCCC   300
TGCCATGCAT TCTGACTGATCA TCTTCAAGAA GGAGCAAGCC ATGTGCCTGG AGAAGATCCA   360
GAGGGCCAAT GAGCTGATGG GCTTCAATGA TTCCTCTCCA GGCTGTCCTG GGATGTGGGA   420
CAACATCACG TGTTGGAAGC CCGCCCATGT GGGTGAGATG GTCCTGGTCA GCTGCCCTGA   480
GCTCTTCCGA ATCTTCAACC CAGACCAAGT CTGGGAGACC GAAACCATTG GAGAGTCTGA   540
TTTTGGTGAC AGTAACTCCT TAGATCTCTC AGACATGGGA GTGGTGAGCG GGAACTGCAC   600
GGAGGATGGC TGGTCGGAAC CCTTCCCTCA TTACTTTGAT GCCTGTGGGT TTGATGAATA   660
TGAATCTGAG ACTGGGGACC AGGATTATTA CTACCTGTCA GTGAAGGCCC TCTACACGGT   720
TGGCTACAGC ACATCCCTCG TCACCCTCAC CACTGCCATG GTCATCCTTT GTCGCTTCCG   780
GAAGCTGCAC TGCACACGCA ACTTCATCCA CATGAACCTG TTTGTGTCGT TCATGCTGAG   840
GGCGATCTCC GTCTTCATCA AAGACTGGAT TCTGTATGCG GAGCAGGACA CGAACCACTG   900
CTTCATCTCC ACTGTGGAAT GTAAGGCCGT CATGGTTTTC TTCCACTACT GTGTTGTGTC   960
CAACTACTTC TGGCTGTTCA TCGAGGGCCT GTACCTCTTC ACTCTGCTGG TGGAGACCTT  1020
CTTCCCTGAA AGGAGATACT TCTACTGGTA CACCATCATT GGCTGGGGGA CCCCAACTGT  1080
GTGTGTGACA GTGTGGGCTA CGCTGAGACT CTACTTTGAT GACACAGGCT GCTGGGATAT  1140
GAATGACAGC ACAGCTCTGT GGTGGGTGAT CAAAGGCCCT GTGGTTGGCT CTATCATGGT  1200
TAACTTTGTG CTTTTTATTG GCATTATCGT CATCCTTGTG CAGAAACTTC AGTCTCCAGA  1260
CATGGGAGGC AATGAGTCCA GCATCTACTT GCGACTGGCC CGGTCCACCC TGCTGCTCAT  1320
CCCACTATTC GGAATCCACT ACACAGTATT TGCCTTCTCC CCAGAGAATG TCAGCAAAAG  1380
GGAAAGACTC GTGTTTGAGC TGGGGCTGGG CTCCTTCCAG GGCTTTGTGG TGGCTGTTCT  1440
CTACTGTTTT CTGAATCGTG AGGTACAAGC GGAGATCAAG CGAAAATGGT GAAGCTGGAA  1500
GGTGAACCGT TACTTCGCTG TGGACTTCAA GCACCGACAC CGGTCTCTGG CCAGCAGTGG  1560
GGTGAATGGG GGCACCCAGC TCTCCATCCT GAGCAAGAGC AGCTCCCAAA TCCGCATGTC  1620
TGGCCTCCCT GCTGACAATC TGGCCACCTG AGCCATGCTC CCCT

Seq ID NO: 276 Protein sequence
Protein Accession #: NP_001109.1

1          11         21         31         41    ·     51
|          |          |          |          |          |
MAGVVHVSLA AHCGACPWGR GRLRKGRAAC KSAAQRHIGA DLPLLSVGGQ WCWPRSVMAG    60
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1058

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        VVHVSLAALL LLPMAPAMHS DCIFKKEQAM CLEKIQRANE LMGFNDSSPG CPGMWDNITC    120
        WKPAHVGEMV LVSCPELPRI FNPDQVWETE TIGESDFGDS NSLDLSDMGV VSRNCTEDGW    180
        SEPFPHYFDA CGFDEYESET GDQDYYYLSV KALYTVGYST SLVTLTTAMV ILCRFRKLHC    240
        TRNFIHMNLP VSFMLRAISV FIKDWILYAE QDSNHCFIST VECKAVMVFP HYCVVSNYFW    300
        LFIEGLYLFT LLVETFFPER RYFYWYTIIG WGTPTVCVTV WATLRLYFDD TGCWDMNDST    360
        ALWWVIKGPV VGSIMVNFVL FIGIIVILVQ KLQSPDMGGN ESSIYLRLAR STLLLIPLFG    420
        IHYTVPAFSP ENVSKRERLV FELGLGSFQG FVVAVLYCFL NGEVQAEIKR KWRSWKVNRY    480
        FAVDFKHRHP SLASSGVNGG TQLSILSKSS SQIRMSGLPA DNLAT
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Seq ID NO: 277 DNA sequence
Nucleic Acid Accession #: NM_004000.1
Coding sequence: 36..1193

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    GTGTAGTGGT CTTGCTGCTT CTCCAGGGAG GATCTGCCTA CAAACTGGTT TGCTACTTTA    120
    CCAACTGGTC CCAGGACCGG CAGGAACCAG GAAAATTCAC CCCTGAGAAT ATTGACCCCT    180
    TCCTATGCTC TCATCTCATC TATTCATTCG CCAGCATCGA AAACAACAAG GTTATCATCA    240
    AGGACAAGAG TGAAGTGATG CTCTACCAGA CCATCAACAG TCTCAAAACC AAGAATCCCA    300
    AACTGAAAAT TCTCTTGTCC ATTGGAGGGT ACCTGTTTGG TTCCAAAGGG TTCCACCCTA    360
    TGGTGGATTC TTCTACATCA CGCTTGGAAT TCATTAACTC CATAATCCTG TTTCTGAGGA    420
    ACCATAACTT TGATGGACTG GATGTAAGCT GGATCTACCC AGATCAGAAA GAAAACACTC    480
    ATTTCACTGT GCTGATTCAT GAGTTAGCAG AAGCCTTTCA GAAGGACTTC ACAAAATCCA    540
    CCAAGGAAAG GCTTCTCTTG ACTGCGGGCG TATCTGCAGG GGCTGCAAATG ATTGATAACA    600
    GCTATCAAGT TGAGAAACTG GCAAAAGATC TGGATTTCAT CAACCTCCTG TCCTTTGACT    660
    TCCATGGGTC TTGGGAAAAG CCCCTTATCA CTGCCCACAA CAGCCCTCTG AGCAAGGGGT    720
    GGCAGGACAG AGGGCCAAGC TCCTACTACA ATGTGGAATA TGCTGTGGGG TACTGGATAC    780
    ATAAGGGAAT GCCATCAGAG AAGGTGGTCA TGGGCATCCC CACATATGGG CACTCCTTCA    840
    CACTGGCCTC TGCAGAAACC ACCGTGGGGG CCCCTGCCTC TGGCCCTGGA GCTGCTGGAC    900
    CCATCACAGA GTCTTCAGGC TTCCTGGCCT ATTATGAGAT CTGCCAGTTC CTGAAAGGAG    960
    CCAAGATCAC GCGCCTCCAG GATCAGCAGG TTCCCTACGC AGTCAAGGGG AACCAGTGGG    1020
    TGGGCTATGA TGATGTGAAG AGTATGGAGA CCAAGGTTCA GTTCTTAAAG AATTTAAACC    1080
    TGGGAGGAGC CATGATCTGG TCTATTGACA TGGATGACTT CACTGGCAAA TCCTGCAACC    1140
    AGGGCCCTTA CCCTCTTGTC CAAGCAGTCA AGAGAAGCCT TGGCTCCTTG TGAAGGATTA    1200
    ACTTACAGAG AAGCAGGCAA GATGACCTTG CTGCCTGGGG CCTGCTCTCT CCCAGGAATT    1260
    CTCATGTGGG ATTCCCCTTG CCAGGCTGGC CTTTGGATCT CTCTTCCAAG CCTTTCCTGA    1320
    CTTCCTCTTA GATCATAGAT TGGACCTGGT TTTGTTTTCC TGCAGCTGTT GACTTGTTGC    1380
    CCTGAAGTAC AATAAAAAAA ATTCATTTTG CTCCAGTA
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Seq ID NO: 278 Protein sequence
Protein Accession #: NP_003991.1

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    1        11        21        31        41        51
    |        |         |         |         |         |
    MDQKSLWAGV VVLLLLQGGS AYKLVCYFTN WSQDRQEPGK FTPENIDPFL CSHLIYSFAS    60
    IENNKVIIKD KSEVMLYQTI NSLKTKNPKL KILLSIGGYL FGSKGFHPMV DSSTSRLEFI    120
    NSIILFLRNH NFDGLDVSWI YPDQKENTHF TVLIHELAEA FQKDFTKSTK ERLLLTAGVS    180
    AGRQMIDNSY QVEKLAKDLD FINLLSFDFH GSWEKPLITG HNSPLSKGWQ DRGPSSYYNV    240
    EYAVGYWIHK GMPSEKVVMG IPTYGHSFTL ASAETTVGAP ASGPGAAGPI TESSGFLAYY    300
    EICQFLKGAK ITRLQDQQVP YAVKGNQWVG YDDVKSMETK VQFLKNLNLG GAMIWSIDMD    360
    DFTGKSCNQG PYPLVQAVKR SLGSL
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Seq ID NO: 279 DNA sequence
Nucleic Acid Accession #: NM_015166.1
Coding sequence: 116..1249

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    AGAACTGGTG ACACGTGGCT GTACATTCAG CACAGCTGTG GTGTCCCCAA GTGCCATGAC    120
    CCAGGAGCCA TTCAGAGAGG AGCTGGCCTA TGACCGGATG CCCACGCTGG AGCGGGGCCG    180
    GCAAGACCCC GCCAGCTATG CCCCAGACGC GAAGCCGAGC GACCTGCAGC TGTCGAAGAG    240
    ACTGCCCCCC TGCTTCAGCC ACAAGACGTG GGTCTTCTCT GTGCTGATGG GGAGCTGCCT    300
    CCTGGTGACC TCGGGGTTTT CGCTGTACCT GGGGAACGTG TTCCCGGCTG AGATGGATTA    360
    CTTGCGCTGT GCTGCAGGCT CTTGCATCCC CTCGGCAATT GTGAGCTTCA CCGTCTCCAG    420
    GAGGAACGCC AATGTGATTC CCAACTTTCA GATATTGTTT GTTTCCACGT TTGCTGTGAA    480
    CACTACGTGT TTAATTTGGT TTGGATGCAA ACTAGTCCTG AACCCATCAG CAATAAACAT    540
    CAACTTCAAC CTCATCCTGC TGCTCCTGCT GGAGCTGCTC ATGGCGGCCA CGGTGATCAT    600
    CGCTGCACGG TCCAGCGAGG AGGACTGCAA GAAAAAGAAG GGCTCCATGT CTGACGCGC    660
    CAACATTCTG GACGAAGTGC CATTTCCTGC TCGGGTCCTG AAATCTTACT CAGTCGTCGA    720
    GGTAATCGCA GGCATCTCTG CCGTCCTCGG GGGGATCATT GCCCTGAACG TGGATGACTC    780
    AGTTTCAGGC CCACACCTCT CAGTGACGTT CTTTTGGATC CTAGTGGCCT GCTTTCCAAG    840
    TGCCATTGCC AGTCATGTGG CAGCAGAGTG TCCCAGCAAG TGTCTGGTGG AGGTCCTGAT    900
    TGCCATAAGC AGCCTCACGT CTCCGCTGCT GTTCACAGCC TCTGGATATC TGTCATTCAG    960
    CATCATGAGA ATCGTTGGAGA TGTTTAAGGA TTACCCGCCA AACACCTACGA    1020
    TGTGCTGCTG CTGCTGCTGC TGCTAGTGCT CCTGCTGCAG GCCGGCCTCA ACACGGGCAC    1080
    CGCCATCCAG TGCGTGCGCT TCAAGGTCAG TGCAAGGCTG CAGGGTGCAT CCTGGGACAC    1140
    CCAGAACGGC CCGCAGGAGC GCCTGGCTGG GGAGGTGGCC AGGAGCCCCC TGAAGGAGTT    1200
    CGACAAGGAG AAAGCCTGGA GAGCCGTCGT GGTGCAAATG GCCCAGTGAC CCCCAGACGC    1260
    GGAAACCGGG TGGCAGCGCC CAGCCTGGCC CCAAGCATGG AAACGCACAA CCCCTAATCG    1320
    CCCTGAGCTA CTGCTTCTAA CACCTCTTTT CCCTTGTGTG AGGGCAAACC AGGCTGCAGG    1380
    TGGGGTTTTC ACTTCCTAGG GTAGTTTAAT TTTAAAATAG GCCAATGTTG GCTAGTCTGT    1440
    GCCTCAGTGA GATCAGTCAG CTCCGAGTGG CTCCCGTGTC GTAACACGAG GAGCATGGCC    1500
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GCAACTTCCC AGGCCGAGGA AGGGCCCCCG GCTCGGCCTC TTGAGAGCCC CACCCCTGAA   1560
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CTGACCAGAC TGTGGGTCCC TGCGTCTCCT GCCCACTCTG ACCGGGCTTC CTCCCTCCAC   1680
GCTTAGGGTC TGTCCCGGGT ACTCAGTCAG CCCAGTGGGA TCTTACCCAC TTCCCTGCAA   1740
GGTGCACCTG CCCCAGGCTC AGGCTGCCCA GCGGCTCTTC CTGGACAGTG AGAGCAGGGC   1800
TTGGCGCCTC TGTCCTGGCC CGGGAGCCGC AGGGGCCCCT CCTCCAGAGC CTGGGCGCAA   1860
GCGACACAGG CTGCCGCTGC TCTCCCAGGT GAAATCCACA CCAGTCCACG CCGGGTCGCC   1920
TGCCCTGTCT CCCTACTTAG ACCCAGTCAT TCTAGAGGGA TCCACCGCCA CACTGGCCGG   1980
CCCACGTCCT GGGTGCTGTC ATGCCCAGCT TGGAGTGCCA CGTGGCCGCT GCCCACGTCC   2040
CGGGCACTGT CATGCCCAGC TTGGAGTGCC ACATGGCCGC TGCCCACGTC CCGGGCACTG   2100
TCATGCCCAG CTTGGAGTGC CACGTGGCCG CTGCTGTGAC AGGCAGTGTT CTTGGGGGTG   2160
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GGGAAGCTGA GCCCCTCCCT CCTGTGTTTG CTCCCATTAC TCAAAATGCA GGACAGATCA   2280
GGTCAGAGCC CAGGAATTCT CACAGGTTCA CCCAGCGCCC TCTACCTCCT AGCAAGTACT   2340
TTGTCTTGAT CCTCACTGAG AAGGCCCCAG GGCAGCGGTC TTCTCCATCT CCGCTGTTTT   2400
GGGGTCTTAG GGTACAGCCC AGGCGGTCAC TGCCCACCTG CCAGGCTGCA GGGACAGTTG   2460
GGTGTGAGAA TAACACTGGC TTTGGGTAGT GCCATGGCCA GGAGTGGGTT TCCCTGCGTC   2520
TCCTCGTCCC GAGGGCGCCT GGGTCCTCCC AGCTGACGGC AGTAAATCCA CAGTGAGTTG   2580
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TTCACAATGG TTTTGTTTCT TTCCTTCTGA TCTGAGAAGA CATGAACGTT TTCTCTTCAC   2700
CGCCGTGGGG TGTATTGACT GGTCCCCCAT GGGCTGCTGG AAAGGCCCGG AGATGCATCT   2760
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CGGCCTGCAG ACCCTGCCAG GGGGTTTGAG GACCCTCCCA GGTTTCCCAC TGCGGAACAG   2880
GAGTGACTCT GGCTGCCAAG ATACCTTCAT GGTGTTCATG ACAAGTGGAA TCATTATTTT   2940
CAACCATTGA AGGGGGATGC AGGCAAGACA CCTTCCCAGC TGCTCCTAGA GGGGACAAGC   3000
CAGGCCCTCT CTGCAGTCCT CGGCAGCTCC GGAAGGACAC AGTCAGGGGC CGGGCAAACA   3060
CTTTGGCCAC AGCCCCAAAC AAGCGCCACC GTGGGAGAGG AGAGGCTGCT GTCACTGGTA   3120
CCGGATGCAG ACCCCACCCT GTCTGCAGGC CACCCCCACC TCCCTGCAGC TTTGAGGCTG   3180
GCGGGGTCTG CTCCTGGGAA TGGGGTGGGA GCCACAGGGA CGACCCGGGG CGGGCTGATG   3240
TCTTCTTGGG GGCAGACCAG AGAGCTCAAG TTTCAGAGTC AGAATTAGGC ACTTGGAACG   3300
TTTTTGCTGG CTTGCACTTT CTTATTTTCT TATTTTAGAG CGCTTAAAAA ATCCGGAAAA   3360
ATGGGGTTTA AAAGAACTGT CTCTTTCAGT CTACATTTTT GTTTAATACG CTTGAGCAAT   3420
AAACGCTGAC TTGCAGACGT G
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Seq ID NO: 280 Protein sequence
Protein Accession #: NP_055981.1

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1          11         21         31         41         51
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CLLVTSGPSL YLGNVFPAEM DYLRCAAGSC IPSAIVSFTV SRRNANVIPN FQILFVSTFA   120
VTTTCLIWPG CKLVLNPSAI NINFNLILLL LLELLMAATV IIAARSSEED CKKKKGSMSD   180
SANILDEVPF PARVLKSYSV VEVIAGISAV LGGIIALNVD DSVSGPHLSV TFFWILVACF   240
PSAIASHVAA ECPSKCLVEV LIAISSLTSP LLFTASGYLS FSIMRIVEMF KDYPPAIKPS   300
YDVLLLLLLL VLLLQAGLNT GTAIQCVRFK VSARLQGASW DTQNGPQERL AGEVARSPLK   360
EFDKEKAWRA VVVQMAQ
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Seq ID NO: 281 DNA sequence
Nucleic Acid Accession #: NM_004518.1
Coding sequence: 43..2577

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AACGGCGGCG TATACCCCGG CCCGAGCGGG GAGAAGAAGC TGAAGGTGGG CTTCGTGGGG   120
CTGGACCCCG GCGCGCCCGA CTCCACCCGG GACGGGGCGC TGCTGATCGC CGGCTCCGAG   180
GCCCCCAAGC GCGGCAGCAT CCTCAGCAAA CCTCGCGCGG GCGGCGCGGG CGCCGGGAAG   240
CCCCCCAAGC GCAACGCCTT CTACCGCAAG CTGCAGAATT TCCTCTACAA CGTGCTGGAG   300
CGGCCGCGCG GCTGGGCGTT CATCTACCAC GCCTACGTGT TCCTCCTGGT TTTCTCCTGC   360
CTCGTGCTGT CTGTGTTTTC CACCATCAAG GAGTATGAGA AGAGCTCGGA GGGGCGCCTC   420
TACATCCTGG AAATCGTGAC TATCGTGGTG TTTGGCGTGG AGTACTTCGT GCGGGATCTGG   480
GCCGCAGGCT GCTGCTGCCG GTACCGTGGC TGGAGGGGGC GGCTCAAGTT TGCCCGGGAAA   540
CCGTTCTGTG TGATTGACAT CATGGTGCTC ATCGCCTCCA TTGCGGTGCT GGCCGCCGGC   600
TCCCAGGGCA ACGTCTTTGC CACATCTGCG CTCCGGAGCC TGCGCTTCCT GCAGATTCTG   660
CGGATGATCC GCATGGACCG GCGGGGGAGGC ACCTGGAAGC TGCTGGGCTC TGTGGTCTAT   720
GCCCACAGCA AGGAGCTGGT CACTGCCTGG TACATCGGCT TCCTTTGTCT CATCCTGGCC   780
TCGTTCCTGG TGTACTTGGC AGAGAAGGGG GAGAACCGACC ACTTTGACAC CTACGCGGAT   840
GCACTCTGGT GGGGCCTGAT CACGCTGACC ACCATTGGCT ACGGGGACAA GTACCCCCAG   900
ACCTGGAACG GCAGGCTCCT TGCGGCAACC TTCACCCTCA TCGGTGTCTC CTTCTTCGCG   960
CTGCCTGCAG GCATCTTGGG GTCTGGGTTT GCCCTGAAGG TTCAGGAGCA GCACAGGCAG  1020
AAGCACTTTG AGAAGAGGCG GAACCCGGCA GCAGGCCTGA TCCAGTCGGC CTGGAGATTC  1080
TACGCCACCA ACCTCTCGCG CACAGACCTG CACTCCACGT GGCAGTACTA CGAGCGAACG  1140
GTCACCGTGC CCATGTACAG ACTTATCCCC CCGCTGAACC AGCTGGAGCT GCTGAGGAAC  1200
CTCAAGAGTA AATCTGGACT CGCTTTCAGG AAGGACCCCC CGCCGGAGCC GTCTCCAAGC  1260
CAGAAGGTCA GTTTGAAAGA TCGTGTCTTC TCCAGCCCCC GAGGCGTGGC TGCCAAGGGG  1320
AAGGGGTCCC CGCAGGCCCA GACTGTGAGG CGGTCACCCA GACCGCGACCA GAGCCTCGAG  1380
GACAGCCCCA GCAAGGTGCC CAAGAGCTGG AGCTTCGGGG ACGGCAGCCG GGCACGCCAG  1440
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GAGGACATTG TGGATGACAA GAGCTGCCCC TGCGAGTTTG TGACCGAGGA CCTGACCCCG  1560
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CACCTGGACA TGCTGTCCCG AATTAAGAGC CTGCAGTCCA GAGTGGACCA GATCGTGGGG  1740
CGGGGCCCAG CGATCACGGA CAAGGACCGC ACCAAGGGCC CGGCCGAGGC GGAGCTGCCC  1800
GAGGACCCCA GCATGATGGG ACGGCTCGGG AAGGTGGAGA AGCAGGTCTT GTCCATGGAG  1860
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     AAGAAGCTGG ACTTCCTGGT GAATATCTAC ATGCAGCGGA TGGGCATCCC CCCGACAGAG  1920
     ACCGAGGCCT ACTTTGGGGC CAAAGAGCCG GAGCCGGCGC CGCCGTACCA CAGCCCGGAA  1980
     GACAGCCGGG AGCATGTCGA CAGGCACGGC TGCATTGTCA AGATCGTGCG CTCCAGCAGC  2040
     TCCACGGGCC AGAAGAACTT CTCGGCGCCC CCGGCCGCGC CCCCTGTCCA GTGTCCGCCC  2100
  5  TCCACCTCCT GGCAGCCACA GAGCCACCCG CGCCAGGGCC ACGGCACCTC CCCCGTGGGG  2160
     GACCACGGCT CCCTGGTGCG CATCCCGCCG CCGCCTGCCC ACGAGCGGTC GCTGTCCGCC  2220
     TACGGCGGGG GCAACCGCGC CAGCATGGAG TTCCTGCGGC AGGAGGACAC CCCGGGCTGC  2280
     AGGCCCCCCG AGGGGACCCT GCGGGACAGC GACACGTCCA TCTCCATCCC GTCCGTGGAC  2340
     CACGAGGAGC TGGAGCGGTTC CTTCAGCGGC TTCAGCATCT CCCAGTCCAA GGAGAACCTG  2400
 10  GATGCTCTCA ACAGCTGCAT CGCGGCCGTG GCGCCTTGTG CCAAAGTCAG GCCCTACATT  2460
     GCGGAGGGAG AGTCAGACAC CGACTCCGAC CTCTGTACCC CGTGCGGGCC CCCGCCACGC  2520
     TCGGCCACCG GCGAGGGTCC CTTTGGTGAC GTGGGCTGGG CCGGGCCCAG GAAGTGAGGC  2580
     GGCGCTGGGC CAGTGGACCC GCCCGCGGCC CTCCTCAGCA CGGTGCCTCC GAGGTTTTGA  2640
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 15  CTGGAGGGGC CCATGTGGGC TGAAGGATGG GGGCTCCTGG CAGTGACCTT TTACAAAAGT  2760
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     TCCTCACCCC TCCCTGTGCT GGAGCCTGTC CCAAAAAGGT GCCAACTGGG AGGCCTCGGA  2880
     AGCCACTGTC CAGGCTCCCA CTGCCTGTCT GCTCTGTTCC CAAAGGCAGC GTGTGTGGCC  2940
     TCGGGCCCTG CGGTGGCATG AAGCATCCCT TCTGGTGTGG GCATCGCTAC GTGTTTTGGG  3000
 20  GGCAGCGTTT CACGGCGGTG CCCTTGCTGT CTCCCTTGGG CTGGCTCAG CCTGGGGTCC  3060
     ATGTCCCTTT GCCGTCCCGT CATGGGGCAG GGAATCCATA GCGGGGCCCA CAGGCAGGGG  3120
     TATGAGTGCG TCCCACCCAA CGCAGCACCA GCCCCGGCCA CCGCTCCCCG TGTCCCCAGT  3180
     TCCGTCTCAG CTACCTGGAC TCCAGGACCC TGGAGAAGGG AGACCTGGCA GTGGAGGGAG  3240
     GCTGTGCTGT GTGTCCCCCT GCAGGTGTGA CCCCGCCTGC TCTTTCCTCC CCCGCCAGGT  3300
 25  GTGGCCCCGC CTGCTCTTTC CTCCCCCACC AGTATGGCCC CACCTGCTCT TTCCTNCCCC  3360
     CCCAAGGTGT GGCCCCACCT GTTCTTTCCT CCCCTGCCGA GGTGTGACCC CACCTGCTCT  3420
     TTCCTCCCTC CCAGTATGGC CCCACCTGCT CTTTCCTCCC CCGAGGTGAG GCCCCGCCTG  3480
     CTCTTTCCTC CCATGGGAGC CGCTGAGGCG TGCGCACCTG GGCACAGGTT GGGGCTCTGC  3540
     AGGATGAGGA AGACAGGCCA ATCCCTTCCC TCCCAGAAGC TGGCCGCCCA GCAGGAGGGA  3600
 30  CTGAGGCCAG ACTCATGTCC AGCAAGGAAC GTGTGGTGTG TCCCCTGGGA AGTCTCTGGG  3660
     CCCTGGGAAG AGGGAAGGTG CACGTCCTGG GATGGTTGCG GGGCCCTGTT TTGGGAGACA  3720
     AAGGGGTAGA GGGTCTGTCT TGNGCCCCCC CAGACTCTAG CCCGAGCAGT GCAGCCACCT  3780
     ACTGCCCCAC CTCAGAGAAG TGCAGCGGGA AGGAGGCTGG AGGTGGTGCG GCGCTGCCTC  3840
     GGGGTGTCTGC GTGAATGAGC GTGGCCAAGG ACCAGTGCCA CCTCATGGCA AAGAGCTCCC  3900
 35  GCAGTGTTTG TTAGAGTGCA CATCCTACGT GCCCACTGGC ACACACACGT GCTCACATAC  3960
     ANGTCNGNGT ACAGGNGTAC ACATGCANGC TTGCACACAT GCACACAGAC CACATAGCAC  4020
     ACATGTGCAC TGACCACACC TGTATAGACC ATGCACAGTA CACATACGTG CATCACACATG  4080
     CCTGCATACA GGCATACACA TGCACGCTTA CATGTACACG TGCACAGATC ACACACATGC  4140
     ACACACGTGT AGCTCACACA CAGTATACAC ATACACAAGT GCACAGACCA CACACAGCAC  4200
 40  TAACACATGC ACACACAAAG TGCATAGGCC ACACAGCACA TGCACACAGG TGCACAGACC  4260
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     CACACTCCTC GCACTTCCAG CCTTGGAGCC CTTCTGTCTC TGGTCTTTCT CTTTGACCCT  4380
     GCTGAGTGTA AGCTGCCTGG GGAGGGGCTA CAAGGAGTAA TTGTGGCTTT AGGGGTCGTG  4440
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     TGTCCGGTTG GGTCCTGTGT TTGGTCTGCC CTGGAGGTGG CTGGGCCCTC CTGGGATGGG  4680
     TGGCTCAGCC TCGAATCCCA GGCCCCAGCC CAGGCAGGTG CTGCTGCCTG TTGTGGTTTC  4740
     CTGGCCCAGC TTCTCCTTCT CCCTCTGCAT AAAATCACAG TCCGTGAGTC TTCCAGCTGC  4800
 50  CACCACGGCT GGGACACGCT GGGGGAGGGC TCCTCCCATG CCTCCTGCAC ACAGCCGTCT  4860
     GAGCAGGGCA GGTGCCAACA CCCCCCACCG GAGACACGCT GCCCCTCAGC GATGCCCCTA  4920
     CCTTTTGGGG GGCCTCGTCT CAAGCCCCCC CTTGGAGGCT GAAATCACCC CAGGCACTGT  4980
     GAGGGCTTCT CCAGGGGGAC ACCCTTTGAG CTGTGGGTCT GATCACCCCA AGTCCCGCAC  5040
     ACGGAGGAGA GGCACAGCCA GGGCGTGTGG TTTAATGTTT GCCCCTTCGG GGCTGGAGGT  5100
 55  CTCAGTGTTT CTAGATTCCA GACCCTGCTG CCAGAGAGAC CTGCTGCCGG AGAGAAGGGG  5160
     AGGAGGACTC CAGCTGGGCT CGGTCCCCCA CAGTCAGGGA CCCCCATAAA GGACACCCCC  5220
     TTCTCTCTAG AAAGAGCTGG GCTCTCAGCT ATTTCTAGTT GCTTCCCAGA AGCCGAGGAG  5280
     CAGAAGGAGC TGTGAGAGCT TTGCAGAAAC GCCCTTGTCC CCGCCCTCCT GAGCTATGAA  5340
     TGCCGTACGG AGCAGAGGCT GGGGCATTGG CAAGATCACA GGTTGATGCT GCACAGCCCC  5400
 60  ATTGACACAA ACCCTCAAAG CAGACGTGAG AGGGACGGTT CACAAAGCTT GGACCTGCCG  5460
     TGGAGGGTGC CCGGCAGACG TGGCGTGAGA GGGACGGCTC ACGAGGCTTG GACCTGCTGT  5520
     GGAGGGTGCC CAGCAGACGT GGTGTGAGGA GAACGGCTCA CGAGACTTGG ACCTGGTGGA  5580
     GGGTGCCCAG CAGACGTGGT GTGAGAGGGA CGGCTCACAG GGCTTGGACC GGAGAGAGAT  5640
     GGCTCACGAG G ACTTGGACCT GCCGTGGAGG GTGCCCAGCA GACGTGGTAT GAGAGGGATG  5700
 65  GCTCACGAGG CTTGGACCTG GTGGAGGGTG CCCGGCAGAC GTGTGAGAGG GACGGTTCAC  5760
     AAGGCTTGGA CCTGCCATGG AGGGTGCCCA GCAGACGTGG TGTGAGAGGG ACAGCTCACG  5820
     AGGCTTGGAC CTGCCGTGGA GGGTGCCCAG CAGGGGGCTG AGCTCTGAGG GGTGGGTGCT  5880
     CAGTGCACGG GTGCCCCCAG TGTCCTCTGA TCCTGTCCGG TGCCTCCCCC AACCCCCACA  5940
     CCCATGCAGA ACTCCCAGGT CACATGCACG TATGTCCAGG GCATGGGGGT GGCGTGAAGA  6000
 70  GGCCTGGTCA GGGCCTTTAG GGGCTGCAGG ACGGAATGGC CACCTGGGGA GCCTGTGTGC  6060
     CTGTCCGGGG CAGCCATCCT GCATTCCCAC CCAGCGCGCA GTCTCCACCT CGGCCCCAGC  6120
     AAAGCGCTAA GCAGCCGGAG AGACAGCCAG GGCGGCTTCC TGAAGGATGT GGGATGGTGG  6180
     ACTCCGGGGT CGAGGGAATA CGCAGGTTCC TGTCCTCCGG GAGACCTAGA GAAGCTGCAC  6240
     ACCCAGGAGC TTTCCATGAC CCGGGAGCAT GAGTGAATGG GGGGTTCCAG TTTGCTGAAC  6300
 75  TTTGCTGTCT TGTAAGGGTG GGGGCTGACG GCCGACCCTG GGAGGAGGTG ACACCGCAGG  6360
     GGGAGGTTGT GGGCAACGGT GGAGGAGGAG AGACGGGAGG GGACCATTTG GGATGGAGGG  6420
     GCCTCTTCAG AGTTTTAAAA GGCGTTTGTG GGGTGGAGTT GAGTGTGCTC TGGGCTTGGA  6480
     CACTTGCCGT GGTGCCCCTG GCTGGCCGAG GAGACTGGCT CTGGCCAGGG CCCCGTCCTG  6540
     AGAGGTCCTC AGCGTCTGAC TCTCGGCCAG GCGCCAGCAA GGAGGGGCCG GTCCCCGGGG  6600
 80  CTACCAGGCA GGCACGGCCA CATCGCCATC GCCACACGCC AACTCCGCCT GGGTTTTACA  6660
     AAGTCGTTGC CTTAATGCAT GTGGACAGGA ACTCCCTGAG GTCGCCCCAT GCCCCCTGGC  6720
     TGTGCCAGGT ACGGACGCCC TGGACCCTGC GAACAGGTGG GGCGGGCGAG GGGCCCAAGG  6780
     GACGGGCTCC AGAGACACGC GCAGGGCAGG AGGGGTCTCA CGGAGGGGTC TCGCACTGAG  6840
     GCGCCCAGAG CTGGTGGTCC CGCTGGACGC CATCCCTCTG CCCGGGATCC ACACGGCCCA  6900
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1061

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CGTGTGCCCG CCATGCCCGC GCCCCACGCC ATTGCAGTCT TCCATCCTCT GGCCGTGACG  6960
GTGGCTGCAG CTTCCCCATT TGCGCCGTTG CCTCTGGCTG TCTGCACTTT TGTTCATGCT  7020
CCAAAGAACA TTTCATAATG CCTTCAGTAC CGACGTACAC TTCTGACCAT TTTGTATGTG  7080
TCCTTGTGCC GTAGTGACCA GGCCTTTTTT TGGTGGATGT GTTACCCCGC ACACTTCAAT  7140
CTCAACTTTG TGCACCGTCC ATTTTCTAGG GATAGACGCC CAGGGAATGA ACTCTAGTTT  7200
TCTAACAGAT TAGCTGAGAT ATTAACTTAC TCACACGGAC AGGTTGATGC CAGAGCCGTA  7260
AGAATGCGCC AGTGCGGGTT TGCGGGGGAC TTCGGGTGTG GGGTCCTGCG GCCGCGATGG  7320
CCGTGGAAGG TTCTGGGGAT CCCTGCTGCC ACGGGGACGA GTTCGGACGC CAGGTGGACC  7380
TGTGCACTCA GTAAAACGCA GTGATTCAAA AAAAAAAAAA
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Seq ID NO: 282 Protein sequence
Protein Accession #: NP_004509.1

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MVQKSRNGGV YPGPSGEKKL KVGFVGLDPG APDSTRDGAL LIAGSEAPKR GSILSKPRAG   60
GAGAGKPPKR NAFYRKLQNF LYNVLERPRG WAFIYHAYVF LLVFSCLVLS VFSTIKEYEK  120
SSEGALYILE IVTIVVFGVE YFVRIWAAGC CCRYRGWRGR LKFARKPFCV IDIMVLIASI  180
AVLAAGSQGN VFATSALRSL RFLQILRMIR MDRRGGTWKL LGSVVYAHSK ELVTAWYIGF  240
LCLILASFLV YLAEKGENDH FDTYADALWW GLITLTTIGY GDKYPQTWNG RLLAATFTLI  300
GVSFFALPAG ILGSGFALKV QEQHRQKHFE KRRNPAAGLI QSAWRFYATN LSRTDLHSTW  360
QYYERTVTVP MYRLIPPLNQ LELLRNLKSK SGLAFRKDPP PEPSPSQKVS LKDRVFSSPR  420
GVAAKGKGSP QAQTVRRSPS ADQSLEDSPS KVPKSWSFGD RSRARQAFRI KGAASRQNSE  480
EASLPGEDIV DDKSCPCEFV TEDLTPGLKV SIRAVCVMRF LVSKRKFKES LRPYDVMDVI  540
EQYSAGHLDM LSRIKSLQSR VDQIVGRGPA ITDKDRTKGP AEAELPEDPS MMGRLGKVEK  600
QVLSMEKKLD FLVNIYMQRM GIPPTETEAY FGAKEPEPAP PYHSPEDSRE HVDRHGCIVK  660
IVRSSSSTGQ KNFSAPPAAP PVQCPPSTSW QPQSHPRQGH GTSPVGDHGS LVRIPPPPAH  720
ERSLSAYGGG NRASMEFLRQ EDTPGCRPPE GTLRDSDTSI SIPSVDHEEL ERSFSGFSIS  780
QSKENLDALN SCYAAVAPCA KVRPYIAEGE SDTDSDLCTP CGPPPRSATG EGPFGDVGWA  840
GPRK
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Seq ID NO: 2838 DNA sequence
Nucleic Acid Accession #: AF152496.1
Coding sequence: 1..2391

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CTGGGAGGGT CTCTGGCTGG GTCCGAGTCA AGACGCTATT CTGTGGCTGA GGAAAAAGAG  120
AAGGGCTTTT TAATAGCCAA CCTAGCAAAG GATCTGGGAC TAAGGGTAGA GGAACTGGCC  180
GCGAGGGGGG CCCAAGTTGT GTCCAAAGGG AACAAACAGC ATTTTCAGCT CAGTCATCAG  240
ACAGGTGATT TGCTCCTGAA TGAGAAATTG GACCGGGAGG AGCTATGCGG CCCCACAGAA  300
CCATGCTAC  TACATTTTCA GATATTACTC CAAAACCCTT TGCAATTCGT TACAAACGAG  360
CTCCGTATCA TAGATGTAAA TGACCATTCT CCGGTATTCT TTGAAAATGA AATGCATCTG  420
AAAATCCTAG AAAGCACTCT GCCAGGAACA GTAATTCCTT TGGGAAATGC TGAGGACTTG  480
GATGTGGGAA GAAACAGCCT CCAAAACTAC ACTATCACTC CGAATTCCCA CTTCCACGTA  540
CTCACTCGCA GTCGTAGGGA CGGAAGGAAG TACCCGGAAC TAGTACTGGA TAAAGCGCTC  600
GATCGGGAGG AGCAGCCGGA ACTCAGCTTA ACGCTCACCG CGCTGGACGG CGGCTCTCCC  660
CCTCGGTCTG GGACAGCCCA GATAAACATC CAGGTCTTAG ATATAAACGA CAATGCACCA  720
GAATTTGCAC AGCCGCTCTA TGAGGTTGCA GTTCTAGAGA ATACCCCCGT TAACTCTGTC  780
ATTGTCACTG TCTCGGCTTC TGACTTAGAT ACAGGAAGTT TTGGGACAAT ATCATATGCA  840
TTTTTTCATG CTTCTGAAGA AATTCGCAAA ACTTTTCAGC TAAATCCAAT TACTGGTGAT  900
ATGCAACTGG TCAAATATTT GAATTTTGAA GCGATTAATA GTTATGAAGT CGACATCGAG  960
GCCAAGGATG GCGGAGGCCT ATCCGGAAAG TCTACAGTCA TAGTCCAGGT GGTTGATGTC 1020
AACGACAACC CACCGGAACT GACCTTGTCT TCAGTAAACA GCCCTATTCC TGAGAACTCG 1080
GGAGAGACTG TACTGGCTGT TTTCAGTGTT TCTGATCTAG ACTCTGGAGA CAACGGAAGA 1140
GTGATGTGTT CCATTGAGAA CAATCTCCCC TTCTTCCTGA AACCATCTGT AGAGAATTTT 1200
TACACCCTAG TGTCAGAAGG CGGCGTGGAC AGAGAGACCA CAACATTACC TCAACATTACC 1260
ATCACTATCA CTGACCTGGG GACACCCAGG CTGAAAACCA AGTACAACAA AACCGTGCTG 1320
GTCTCCGACG TCAATGACAA CGGCCCCGCC TTCACCCAAA TCTCCTACAC CCTGTTCGTC 1380
CGCGAGAACA ACAGCCCCGC CCTGCACATC GGCAGTGTCA CAGACAGCTC GACAGACTCA 1440
GGCACCAACG CCCAGGTAAC CTACTCGCTG CTGCCGCCCC AGGACCGGCA CCTGCCCCTC 1500
TCTTCCCTGG TCTCCATCAA CGCGGACAAC GGCCACCTGT TTGCCCTCAG GTCGCTGGAC 1560
TACGAGGCCC TGCAGGCGGTT CGAGTTCCGC GTGGGCGCCA CAGACCGTGG CTCCCGGGCT 1620
TTGAGCAGCG AGGCGCTGGT GCGCGTGCTG GTGCTGGACG CCAACGACAA CTCGCCCTTC 1680
GTGCTGTACC CGCTGCAGAA CGGCTCCGCG CCCTGCACCG AGCTGGTGCC CGGGCGGGCT 1740
GAGCCGGGCT ACCTGGTGAC CAAGGTGGTG GCGGTGGACG GCGACTCGGG CCAGAACGCC 1800
TGGCTGTCGT ACCAGCTGCT CAAGGCCACG GAGCCCGGGC TGTTCGGCGT GTGGGCGCAC 1860
AATGGCGAAG TGCGCACCGC CAGGCTGCTG AGCGAGCGCG ACGCGGCCAA GCACAGGCTG 1920
GTGGTGCTGG TCAAGGACAA TGGCGAGCCT CCGCGCTCGG CCACCGGCAC GCTGCATGTG 1980
CTCCTGGTGG ACGGCTTCTC CCAGCCCTAC CTGCCTCTCC CGGAGGCGGC ACCGGCCCAG 2040
GCCCAGGCCG ACTTGCTCAC CGTCTACCTG GTGGTGGCAT TGGCCTCGGT GTCTTCGCTC 2100
TTCCTCTTTT CGGTGCTCCT GTTCGTGGCG GTGCGGCTGT GCAGGAGGAG CAGGGCGGCC 2160
TCGGTGGGTC GCTGCTCGGT GCCCGAGGGC CCCTTTCCAG GCAGATGGT GGACGTGAGC 2220
GGCACCGGGA CCCTGTCCCA GAGCTACCAG TACGAGGTGT GTCTGACTGG AGGCTCCGGG 2280
ACAAATGAGT TCAAGTTCCT GAAGCCAATT ATCCCCAACT TCGTTGCTCA GGGTGCAGAG 2340
AGGGTTAGCG AGGCAAATCC CAGTTTCAGG AAGAGCTTTG AATTCAGTTA A
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Seq ID NO: 284 Protein sequence
Protein Accession #: AAD43757.1

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1         11        21        31        41        51
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MEAGGERFLR QRQVLLLFVF LGGSLAGSES RRYSVAEEKE KGFLIANLAK DLGLRVEELA   60
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     ARGAQVVSKG NKQHFQLSHQ TGDLLLNEKL DREELCGPTE PCILHFQILL QNPLQFVTNE   120
     LRIIDVNDHS PVFFENEMHL KILESTLPGT VIPLGNAEDL DVGRNSLQNY TITPNSHFHV   180
     LTRSRRDGRK YPELVLDKAL DREEQPELSL TLTALDGGSP PRSGTAQINI QVLDINDNAP   240
     EFAQPLYEVA VLENTPVNSV IVTVSASDLD TGSFGTISYA FFHASEEIRK TFQLNPITGD   300
  5  MQLVKYLNFE AINSYEVDIE AKDGGGLSGK STVIVQVVDV NDNPPELTLS SVNSPIPENS   360
     GETVLAVFSV SDLDSGDNGR VMCSIENNLP FFLKPSVENF YTLVSEGALD RETRSEYNIT   420
     ITITDLGTPR LKTKYNITVL VSDVNDNAPA FTQISYTLFV RENNSPALHI GSVSATDRDS   480
     GTNAQVTYSL LPPQDPHLPL SSLVSINADN GHLFALRSLD YEALQAFEFR VGATDRGSPA   540
     LSSEALVRVL VLDANDNSPF VLYPLQNGSA PCTELVPRAA EPGYLVTKVV AVDGDSGQNA   600
 10  WLSYQLLKAT EPGLFGVWAH NGEVRTARLL SERDAAKHRL VVLVKDNGEP PRSATATLHV   660
     LLVDGFSQPY LPLPEAAPAQ AQADLLTVYL VVALASVSSL FLFSVLLFVA VRLCRRSRAA   720
     SVGRCSVPEG PFPGQMVDVS GTGTLSQSYQ YEVCLTGGSG TNEFKFLKPI IPNFVAQGAE   780
     RVSEANPSFR KSFEFS
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15 Seq ID NO: 285 <u>DNA sequence</u>
    Nucleic Acid Accession #: NM_001794.2
    Coding sequence: 15..2765

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     GCGCGCTCCG GGCCCATAAT GAGGATCTTA CAACTAGAGA GACCTGCAAG GCTGGGTTCT   120
     CTGAAGATGA TTACACGGCA TTAATCTCCC AAAATATTCT AGAAGGGGAA AAGCTACTTC   180
     AAGTCAAGTT CAGCAGCTGT GTGGGGACCA AGGGGACACA ATATGAGACC AACAGCATGG   240
25   ACTTCAAAGT TGGGGCAGAT GGGACAGTCT TCGCCACCCG GGAGCTGCAG GTCCCCTCCG   300
     AGCAGGTGGC GTTCACGGTG ACTGCATGGG ACAGCCAGAC AGCAGAGAAA TGGGACGCCG   360
     TGGTGCGGTT GCTGGTGGCC CAGACCTCGT CCCCGCACTC TGGACACAAG CCGCAGAAAG   420
     GAAAGAAGGT CGTGGCTCTG GACCCCTCTC CGCCTCCGAA GGACACCCTG CTGCCGTGGC   480
     CCCAGCACCA GAACGCCAAC GGGCTGAGGC GGCGCAAACG GGACTGGGTC ATCCCGCCCA   540
30   TCAACGTGCC CGAGAACTCG CGCGGGCCCT TCCGCAGCA GCTCGTGAGG ATCCGGTCCG   600
     ACAAAGACAA TGACATCCCC ATCCGGTACA GCATCACGGG AGTGGGCGCC GACCAGCCCC   660
     CCATGGAGGT CTTCAGCATT GACTCCATGT CCGGCCGGAT GTACGTCACA AGGCCCATGG   720
     ACCGGGAGGA GCACGCCTCT TACCACCTCC GAGCCCACGC TGTGGACATG AATGGCAACA   780
     AGGTGGAGAA CCCCATCGAC CTGTACATCT ACGTCATCGA CATGAATGAC AACCGCCCTG   840
35   AGTTCATCAA CCAGGTCTAC AACGGCTCCG TGGACGAGGG CTCCAAGCCA GGCACCTACG   900
     TGATGACCGT CACGGCCAAC GATGCTGACG ACAGCACCAC GGCCAACGGG ATGGTGCGGT   960
     ACCGGATCGT GACCCAGACC CCACAGAGCC CGTCCCAGAA TATGTTCACC ATCAACAGCG  1020
     AGACTGGAGA TATCGTCACA GTGGCGGCTG GCCTGGACCG AGAGAAAGTT CAGCAGTACA  1080
     CAGTCATCGT TCAGGCCACA GATATGGAAG GAAATCTCAA CTATGGCCTC TCAAACACAG  1140
40   CCACAGCCAT CATCACGGTG ACAGATGTGA ATGACAACAC GCCAGAATTT ACCGCCAGCA  1200
     CGTTTGCAGG GGAGGTCCCC GAAAACCGCG TGGAGACCGT GGTCGCAAAC CTCACGGTGA  1260
     TGGACCGAGA TCAGCCCCAC TCTCCAAACT GGAATGCCGT TTACCGCATC ATCAGTGGGG  1320
     ATCCATCCGG GCACTTCAGC GTCCGCACAG ACCCCGTAAC CAACGAGGGC ATGGTCACCG  1380
45   TGGTGAAGGC AGTCGGACTAC GAGCTCAACA GAGCTTTCAT GCTGACAGTG ATGGTGTCCA  1440
     ACCAGGGCGCC CCTGGCCACC GGAATCCAGA TGTCCTTCCA GTCCACGGCA GGGGTGACCA  1500
     TCTCCATCAT GGACATCAAC GAGGCTCCCT ACTTCCCCTC AAACCACAAG CTGATCCGCC  1560
     TGGAGGAGGG CGTGCCCCCC GGCACCGTGC TGACCACGTT TTCAGCTGTG GACCCTGACC  1620
     GGTTCATGCA GCAGGCTGTG AGATACTCAA AGCTGTCAGA CCCAGCGAGC TGGCTGACCA  1680
50   TCAATGCCAC CAACGGCCAG ATCACCACGG CGGCAGTGCT GGACCGTGAG TCCCTCTACA  1740
     CCAAAAACAA CGTCTACGAG GCCACCTTCC TGGCAGCTGA CAATGGGATA CCCCCGGCCA  1800
     GCGGCACCGG GACCCTCCAG ATCTATCTCA TTGACATCAA CGACAACGCC ATCACCGGCG  1860
     TGCCCAAGGA GGCGCAGATC TGCGAGAAGC CCAACCTGAA CGCCATCAAC ATCACGGCGG  1920
     CCGACGCTGA CGTCGACCCC AACATCGGCC CCTACGTCTT CGAGCTGCCC TTTGTCCCGG  1980
55   CGGCCGTGCG GAAGAACTGG ACCATCACCC GCCTGAACGG TGACTATGCC CAACTCAGCT  2040
     TGCGCATCCT GTACCTGGAG GCCGGGGATGT ATGACGTCCC CATCATCGTC ACAGACTCTG  2100
     GAAACCCTCC CCTGTCCAAC ACGTCCATCA TCAAAGTCAA GGTGTGCCCA TGTGATGACA  2160
     ACGGGGACTG CACCACCATT GGCGCAGTGG CAGCGGCTGG TCTGGGCACC GGTGCCATCG  2220
     TGGCCATCCT CATCTGCATC CTCATCCTGC TGACCATGGT CCTGCTGTTT GTCATGTGGA  2280
60   TGAAGCGGCG AGAGAAGGAG CGCCACACGA AGCAGCTGCT CATTGACCCC GAGGACGACG  2340
     TCCGCGACAA CATCCTCAAG TATGACGAGG AAGGCGGTGG CGAGGAGGAC CAGGACTACG  2400
     ACCTCAGCCA GCTGCAGCAG CCGGAAGCCA TGGGGCACGT GCCCCTGAGC AAGCCCCTGA  2460
     TGCGTCGCGT GGATGAGCGG CCGGTGGGCG CTGAGCCCCA GTACCCGATC AGGCCCATGG  2520
     TGCCGCACCC AGGCGACATC GGTGACTTCA TCAATGAGGG ACTCCGCGCT GCTGACAACG  2580
65   ACCCCACGGC ACCCCCCTAT GACTCCCTGC TGGTCTTCGA CTACGAGGGG AGCGGCTCCA  2640
     CCGCAGGCTC CGTCAGCTCC CTGAACTCAT CCAGTTCCGG GGACCAAGAC TACGATTACC  2700
     TCAACGACTG GGGGCCCAGA TTCAAGAAGC TGGCGGACAT GTATGGAGGT GGTGAAGAGG  2760
     ATTGACTGAC CTCGCATCTT CGGACCGAAG TGAGAGCCGT GCTCGGACGC CGGAGGAGCA  2820
70   GGACTGAGCA GAGGCGGCCG GTCTTCCCGA CTCCCTGCGG CTGTGTCCTT AGTGCTGTTA  2880
     GGAGGCCCCC CAATCCCCAC GTTGAGCTGT CTAGCATGAG CACCCACCCC CACAGCGCCC  2940
     TGCACCCGGC CGCTGCCCAG CACCGCGCTG GCTGGCACTG AAGGACAGCA AGAGGCACTC  3000
     TGTCTTCACT TGAATTTCCT AGAACAGAAG CACTGTTTTT AAAAAAAAAA AAAAAAAAAG  3060
     AAG
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    Seq ID NO: 286 <u>Protein sequence</u>
75 Protein Accession #: NP_001785.2

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      |          |          |          |          |          |
     MTAGAGVLLL LLSLSGALRA HNEDLTTRET CKAGFSEDDY TALISQNILE GEKLLQVKFS    60
80   SCVGTKGTQY ETNSMDFKVG ADGTVFATRE LQVPSEQVAF TVTAWDSQTA EKWDAVVRLL   120
     VAQTSSPHSG HKPQKGKKVV ALDPSPPPKD TLLPWPQHQN ANGLRRRKRD WVIPPINVPE   180
     NSRGPFPQQL VRIRSDKDND IPIRYSITGV GADQPPMEVF SIDSMSGRMY VTRPMDREEH   240
     ASYHLRAHAV DMNGNKVENP IDLYIYVIDM NDNRPEFINQ VYNGSVDEGS KPGTYVMTVT   300
     ANDADDSTTA NGMVRYRIVT QTPQSPSQNM FTINSETGDI VTVAAGLDRE KVQQYTVIVQ   360
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ATDMEGNLNY GLSNTATAII TVTDVNDNPP EFTASTFAGE VPENRVETVV ANLTVMDRDQ   420
PHSPNWNAVY RIISGDPSGH FSVRTDPVTN EGMVTVVKAV DYELNRAFML TVMVSNQAPL   480
ASGIQMSFQS TAGVTISIMD INEAPYFPSN HKLIRLEEGV PPGTVLTTFS AVDPDRFMQQ   540
AVRYSKLSDP ASWLHINATN GQITTAAVLD RESLYTKNNV YEATFLAADN GIPPASGTGT   600
LQIYLIDIND NAPELLPKEA QICEKPNLNA INITAADADV DPNIGPYVFE LPFVPAAVRK   660
NWTITRLNGD YAQLSLRILY LEAGMYDVPI IVTDSGNPPL SNTSIIKVKV CPCDDNGDCT   720
TIGAVAAAGL GTGAIVAILI CILILLTMVL LFVMWMKRRE KERHTKQLLI DPEDDVRDNI   780
LKYDEEGGGE EDQDYDLSQL QQPEAMGHVP SKAPGVRRVD ERPVGAEPQY PIRPMVPHPG   840
DIGDFINEGL RAADNDPTAP PYDSLLVFDY EGSGSTAGSV SSLNSSSSGD QDYDYLNDWG   900
PRFKKLADMY GGGEED
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Seq ID NO: 287 DNA sequence
Nucleic Acid Accession #: AF152495.1
Coding sequence: 1..2397

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GTTTTGCTGG GCATAGCTCA GGCTAGTTGC CAGCCTAGGC ACTATTCAGT GGCCGAGGAA   120
ACGGAGAGTG GCTCCTTTGT GGCCAATTTG TTAAAAGACC TGGGGCTGGA GATAGGAGAA   180
CTTGCTGTGA GGGGGGCCAG GGTCGTTTCC AAAGGAAAAA AAATGCATTT GCAGTTCGAT   240
AGGCAGACCG GGGATTTGTT GTTAAATGAG AAATTGGACC GGGAGGAGCT GTGCGGCCCC   300
ACAGAGCCCT GTGTCCTACC TTTCCAGGTG TTACTAGAAA ATCCCTTGCA GTTTTTTCAG   360
GCGGAGCTAC GGATTAGGGA CGTAAATGAT CATTCCCCAG TTTTCCTAGA CAAAGAAATA   420
CTTTTGAAAA TTCCAGAAAG TATCACTCCT GGAACTACTT TCTTAATAGA ACGTGCCCAG   480
GACTTGGATG TAGGAACCAA CAGTCGTCCAA AATTACACAA TCAGTCCCAA TTTCCACTTT   540
CATCTTAATT TACAAGACAG TCTCGATGGC ATAATATTAC CACAGCTGGT GCTGAACAGA   600
GCCCTGGATC GCGAGGAGCA GCCTGAGATC AGGTTAACCC TCACAGCGCT AGATGGCGGG   660
AGTCCACCCA GGTCCGGCGA GGCCCTGGTA CGGATTGAAG TTGTGGACAT CAATGACAAC   720
GTCCCAGAGT TTGCAAAGCT GCTCTATGAG GTGCAGATCC CGGAGGACAC CCCCGTTGGA   780
TCCCAGGTTG CCATCGTCTC TGCCAGGGAT TTAGACATTG GAACTAATGG AGAAATATCT   840
TATGCATTTT CCCAAGCATC TGAAGACATT CGCAAAACGT TTCGATTAAG TGCAAAATCG   900
GGAGAACTGC TTTTAAGACA GAAACTGGAT TTCGAATCCA TCCAGACATA CACAGTAAAT   960
ATTCAGGCGA CAGATGGTGG GGGCCTATCT GGAACTTGTG TGGTATTTGT CCAAGTGATG  1020
GATTTGAATG ACAATCCTCC GGAACTAACT ATGTCGACAC TTATCAATCA GATCCCAGAA  1080
AACTTGCAGG ACACCCTCAT TGCTGTATTC AGCGTTTCAG ATCCTGACTC CGGAGACAAC  1140
GGAAGGATGG TGTGCTCCAT CCAAGATGAT CTTCCTTTTT TCTTGAAACC TTCTGTTGAG  1200
AACTTTTACA CTCTGGTGAT AAGCACGGCC CTGGACCGGG AGACCAGATC CGAATACAAC  1260
ATCACCATCA CCGTCACCGA CTTCGGGACA CCCAGGCTGA AAACCGAGCA CAACATAACC  1320
GTGCTGGTCT CCGACGTCAA TGACAACGCC CCCGCCTTCA CCCAAACCTC CTACACCCTG  1380
TTCGTCCGCG AGAACAACAG CCCCGCCCTG CACATCGGCA GCGTCAGCGC CACAGACAGA  1440
GACTCGGGCA CCAACGCCCA GGTCACCTAC TCGCTGCTGC CGCCCCAGGA CCCGCACCTG  1500
CCCCTCGCCT CCCTGGTCTC CATCAACGCG GACAACGGCC ACCTGTTCGC TCTCCAGTCG  1560
CTGGACTACG AGGCCCTGCA GGCGTTCGAG .TTCCGCGTGG GCGCCGCAGA CCGCGGCTCC  1620
CGGCGGTTGA GCAGCGAGGC GCTGGTGCGC GTGCTGGTGC TGGACGCCAA CGACAACTCG  1680
CCCTTCGTGC TGTACCCGCT GCAGAACGGC TCCGCGCCCT GCACCGAGCT GGTGCCCGG   1740
GCGGCCGAGC CGGGCTACCT GGTGACCAAG GTGGTGGCGG TGGACGGCGA CTCGGGCCAG  1800
AACGCCTGGC TGTCGTACCA GCTGCTCAAG GCCACGGAGC CCGGGCTGTT CGGCGTGTGG  1860
GCGCACAATG GCGAGGTGCG CACCGCCAGG CTGCTGAGGG AGCGCGACGC TGCCAAGCAG  1920
AGGCTGGTGG TGCTGGTCAA GGACAATGGC GAGCCTCCGC GCTCGGCCAC CGCCACGCTG  1980
CACGTGCTCC TGGTGGACGG CTTCTCCCAG CCCTACCTGC TGCTCCCGGA GGCGGCACCG  2040
GCCCAGGCCC AGGCCGACTT GCTCACCGTC TACCTGGTGG TGGCGTTGGC CTCGGTGTCT  2100
TCGCTCTTCC TCTTCTCGGT GCTCCTGTTC GTGGCGGTGC GGCTGTGCAG GAGGAGCAGG  2160
GCGGCCTCGG TGGGTCGCTC CTCGGTGCCC GAGGGCCCCT TCCCAGGGCA GATGGTGGAC  2220
GTGAGCGGCA CCGGGACCCT GTCCCAGAGC TACCAGTACG AGGTGTGTCT GACTGGAGGC  2280
TCCGGGACAA ATGAGTTCAA GTTCCTGAAG CCAATTATCC CCAACTTCGT TGCTCAGGGT  2340
GCAGAGAGGG TTAGCGAGGC AAATCCCAGT TTCAGGAAGA GCTTTGAATT CACTTAA
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Seq ID NO: 288 Protein sequence
Protein Accession #: AAD43756.1

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LAVRGARVVS KGKKMHLQFD RQTGDLLLNE KLDREELCGP TEPCVLPFQV LLENPLQFFQ   120
AELRIRDVND HSPVFLDKEI LLKIPESITP GTTFLIERAQ DLDVGTNSLQ NYTISPNFHF   180
HLNLQDSLDG IILPQLVLNR ALDREEQPEI RLTLTALDGG SPPRSGTALV RIEVVDINDN   240
VPEFAKLLYE VQIPEDSPVG SQVAIVSARD LDIGTNGEIS YAFSQASEDI RKTFRLSAKS   300
GELLLRQKLD FESIQTYTVN IQATDGGGLS GTCVVFVQVM DLNDNPPELT MSTLINQIPE   360
NLQDTLIAVF SVSDPDSGDN GRMVCSIQDD LPFFLKPSVE NFYTLVISTA LDRETRSEYN   420
ITITVTDFGT PRLKTEHNIT VLVSDVNDNA PAFTQTSYTL FVRENNSPAL HIGSVSATDR   480
DSGTNAQVTY SLLPPQDPHL PLASLVSINA DNGHLFALQS LDYEALQAFE FRVGAADRGS   540
PALSSEALVR VLVLDANDNS PFVLYPLQNG SAPCTELVPR AAEPGYLVTK VVAVDGDSGQ   600
NAWLSYQLLK ATEPGLFGVW AHNGEVRTAR LLRERDAAKQ RLVVLVKDNG EPPRSATATL   660
HVLLVDGFSQ PYLLLPEAAP AQAQADLLTV YLVVALASVS SLFLFSVLLF VAVRLCRRSR   720
AASVGRCSVP EGPFPGQMVD VSGTGTLSQS YQYEVCLTGG SGTNEFKFLK PIIPNFVAQG   780
AERVSEANPS FRKSFEFT
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Seq ID NO: 289 DNA sequence
Nucleic Acid Accession #: NM_018674.1
Coding sequence: 390..2009

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1         11        21        31        41        51
|         |         |         |         |         |
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        CGGAGCACAT GCTGAGCGGA GCGGCTGGGG CTGCGCGGCG TGGCGGAGCA GCGCTCGCTC      60
        CCTCGCTCAC TCGCTCGCTC GCAGGGACAC ACGCAGGGGC TGACAGCTGT GCTGGTGCTG     120
        ATAAGGGAAG CCACAAGGAG ACGATCGAGG AGAGAGACAA AGGCAGCAGC AGGCAGCAGC     180
        GGCAGAGGCA GCACCAGGGC TGCGGAGCTG CTGGGAGTGG GAGTGACTCC CCCACCTCGG     240
5       GCCCCCACCC TGTCCCTGTC CTCTTCCCGC TTGCCCTGAG TTTAGAAGAG CAGCCGCTGC     300
        CACCACTGCC ACTCGGGAGG GCACCAGGGC TGCTGGCTAG GGAGGGACAG GGCAGGGAGG     360
        CTCTGGCCAG TCCCAGCAGC CGGGGACAGA TGCCGATCGA GATTGTGTGC AAAATCAAAT     420
        TTGCTGAGGA GGATGCGAAA CCCAAGGAGA AGGAGGCAGG GGATGAGCAG AGCCTCCTCG     480
        GGGCTGTTGC CCCTGGAGCA GCCCCCCGAG ACCTGGCCAC CTTTGCCAGC ACCAGCACCC     540
10      TGCATGGACT GGGCCGGGCC TGTGGCCCAG GCCCCCACGG ACTGCGCAGA ACCCTGTGGG     600
        CACTGGCCCT ACTCACCTCG CTGGCTGCCT TCCTGTACCA GGCGGCTGGC CTGGCCCGGG     660
        GCTACCTGAC CCGGCCTCAC CTGGTGGCAA TGGACCCCGC TGCCCCAGCC CCAGTGGCGG     720
        GCTTCCCGGC TGTCACCCTC TGCAATATCA ACCGCTTCCG GCATTCGGCA CTCAGCGATG     780
        CCGACATCTT CCACCTGGCC AATCTGACAG GGCTGCCCCC CAAAGACCGG GATGGGCACC     840
15      GTGCGGCTGG CCTGCGCTAC CCAGAGCCTG ACATGGTAGA CATCCTCAAC CGCACTGGCC     900
        ACCAGCTCGC CGACATGCTT AAGAGCTGCA ACTTCAGTGG GCATCACTGC TCCGCCAGCA     960
        ACTTCTCTGT GGTCTATACT CGCTATGGGA AGTGTTACAC CTTCAACGCG GACCCGCGGA    1020
        GCTCGCTGCC CAGCCGGGCA GGGGGCATGG GCAGTGGCCT GGAGATCATG CTGGACATCC    1080
        AGCAGGAGGA GTACCTGCCC ATCTGGAGGG AGACAAATGA GACGTCGTTT GAGGCAGGTA    1140
20      TTCGGGTGCA GATCCACAGC CAGGAGGAGC CGCCCTACAT CCACCAGCTG GGGTTCGGGG    1200
        TGTCCCCAGG CTTCCAGACC TTTGTGTCCT GCCAGGAACA GCGGCTGACC TACCTGCCCC    1260
        AGCCCTGGGG CAACTGCCGC GCAGAGAGTG AGCTCAGGGA GCCTGAGCTT CAGGGCTACT    1320
        CGGCCTACAG TGTGTCTGCC TGCCGGCTGC GCTGTGAAAA GGAGGCCGTG CTTCAGCGCT    1380
        GCCACTGCCG GATGGTGCAC ATGCCAGGCA ATGAGACCAT CTGCCCACCA AATATCTACA    1440
25      TCGAGTGTGC AGACCACACA CTGGACTCCC TGGGTGGGGG CCCTGAGGGC CCGTGCTTCT    1500
        GCCCCACCCC CTGCAACCTG ACACGCTATG GGAAAGAGAT CTCCATGGTC AGGATCCCCA    1560
        ACAGGGGCTC AGCCCGGTAC CTGGCGAGGA AGTACAACCG CAACGAGACC TACATACGGG    1620
        AGAACTTCCT GGTCCTAGAT GTCTTCTTTG AGGCCCTGAC CTCTGAAGCC ATGGAGCAGC    1680
        GAGCAGCCTA TGGCCTGTCA GCCCTGCTGG GAGACCTCGG GGGACAGATG GGCCTGTTCA    1740
30      TTGGGGCCAG CATCCTCACG TTGCTGGAGA TCCTCGACTA CATCTATGAG GTGTCCTGGG    1800
        ATCGACTGAA GCGGGTATGG AGGCGTCCCA AGACCCCCCT GCGGGACCTCC ACTGGGGGCA    1860
        TCTCCACTTT GGGGCTTCAG GAGCTGAAGG AACAGAGTCC CTGCCCGAGC CTGGGCCGAA    1920
        CGGAGGGTGG GGGGGTCAGC AGTCTGCTCC CCAATCACCA CCACCCCCAC GGTCCCCCAG    1980
        GAGGTCTCTT TGAAGATTTT GCTTGCTAGG ACGGTGCTGT GACTGAAAGG ACCCAGGAGT    2040
35      CTGGGACCCC TCCTGGGATC CCCAGCACAT TCTCCTGCTC CTGGGAGAGG CCTGGGGGCG    2100
        GTGCTCACTG GGAGGGCCAG GACTCAGTTC CTGCTCTCAT CCTCCCCTGC CCTGATGTCA    2160
        GCTGCTTTGC ACAAAGGTCC TTCTTGTCCA CACCCCTTAT CCCCAGGCTG GTGCCCCGGG    2220
        AGGGCTGGAG ACCAGGCCAT GGGCCCTCAC GGAGAGGAAG GGAAGGAAGG AGAGGGAGGG    2280
        GGAGGATAGA GCCCATCCCA GCCGGGGAGG GGGAGCCCTC TGTACATTTG TAAATATTTA    2340
40      GGGAAAGCCG GGTGGGGGGA GGGGATACAG ATGTAGAAGG TGGGTAGGGC TACAGGGGTG    2400
        GGTGATTTAG GGACAGCCAG GGTCCCAGCC CCAATGTCAG CAGGATAGGG AGAGCCCCAG    2460
        GACTCAGGAG TGCTGGGCTG GTCCTACTTC CTGCCCCTCT CCAGGCCCAG CTCCCCTCTT    2520
        GGCAGGGGGA GAGGATGGCC CAGCAGGCCT GGCCCAGCTC CCAGTTCCCC CTGCACCAGC    2580
        CCCACCCCTA GAGTCCCTTC TATAGGGAGG GGGCAGGAGA CCTTCCGACA TTCGGCTGAG    2640
45      CTTGGAGGGT GGGAAGGGAG CCTTCTCAGT CCTCTCTCCC TCCAGTCTGA TTTTATAAAG    2700
        TGCTGACGAG
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Seq ID NO: 290 Protein sequence
Protein Accession #: NP_061144.1

50

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        1          11         21         31         41         51
        |          |          |          |          |          |
        MPIEIVCKIK FAEEDAKPKE KEAGDEQSLL GAVAPGAAPR DLATPASTST LHGLGRACGP     60
55      GPHGLRRTLW ALALLTSLAA FLYQAAGLAR GYLTRPHLVA MDPAAPAPVA GFPAVTLCNI    120
        NRFRHSALSD ADIFHLANLT GLPPKDRDGH RAAGLRYPEP DMVDILNRTG HQLADMLKSC    180
        NFSGHHCSAS NFSVVYTRYG KCYTFNADPR SSLPSRAGGM GSGLEIMLDI QQEEYLPIWR    240
        ETNETSFEAG IRVQIHSQEE PPYIHQLGFG VSPGFQTFVS CQEQRLTYLP QPWGNCRAES    300
        ELREPELQGY SAYSVSACRL RCEKEAVLQR CHCRMVHMPG NETICPPNIY IECADHTLDS    360
60      LGGGPEGPCF CPTPCNLTRY GKEISMVRIP NRGSARYLAR KYNRNETYIR ENFLVLDVFF    420
        EALTSEAMEQ RAAYGLSALL GDLGGQMGLF IGASILTLLE ILDYIYEVSW DRLKRVWRRP    480
        KTPLRTSTGG ISTLGLQELK EQSPCPSLGR AEGGVVSSLL PNHHHPHGPP GGLFEDPAC
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Seq ID NO: 291 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 62..895

65

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        1          11         21         31         41         51
        |          |          |          |          |          |
        CACTGCTCTG AGAATTTGTG AGCAGCCCCT AACAGGCTGT TACTTCACTA CAACTGACGA     60
70      TATGATCATC TTAATTTACT TATTTCTCTT GCTATGGGAA GACACTCAAG GATGGGGATT    120
        CAAGGATGGA ATTTTTCATA ACTCCATATG GCTTGAACGA GCAGCCGGTG TGTACCACAG    180
        AGAAGCACGG TCTGGCAAAT ACAAGCTCAC CTACGCAGAA GCTAAGGCGG TGTGTGAATT    240
        TGAAGGCGGC CATCTCGCAA CTTACAAGCA GCTAGAGGCA GCCAGAAAAA TTGGATTTCA    300
        TGTCTGTGCT GCTGGATGGA TGGCTAAGGG CAGAGTTGGA TACCCCATTG TGAAGCCAGG    360
75      GCCCAACTGT GGATTTGGAA AAACTGGCAT TATTGATTAT GGAATCCGTC TCAATAGGAG    420
        TGAAAGATGG GATGCCTATT GCTACAACCC ACACGCAAAG GAGTGTGGTG GCGTCTTTAC    480
        AGATCCAAAG CAAATTTTTA AATCTCCAGG CTTCCCAAAT GAGTACGAAG ATAACCAAAT    540
        CTGCTACTGG CACATTGAGC TCAAGTATGG TCAGCGTATT CACCTGAGTT TTTTAGATTT    600
        TGACCTTGAA GATGACCCAG GTTGCTTGGC TGATTATGTT GAAATATATG ACAGTTACGA    660
80      TGATGTCCAT GGCTTTGTGG GAAGATACTG TGGGAGATGAG CTTCCAGATG ACATCATCAG    720
        TACAGGAAAT GTCATGACCT TGAAGTTTCT AAGTGATGCT TCAGTGACAG CTGGAGGTTT    780
        CCAAATCAAA TATGTTGCAA TGGATCCTGT ATCCAAATCC AGTCAAGGAA AAAATACAAG    840
        TACTACTTCT ACTGGAAATA AAAACTTTTT AGCTGGAAGA TTTAGCCACT TATAAAAAAA    900
        AAAAAAAGGA TGATCAAAAC ACACAGTGTT TATGTTGGAA TCTTTTGGAA CTCCTTTGAT    960
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       CTCACTGTTA TTATTAACAT TTATTTATTA TTTTTCTAAA TGTGAAAGCA ATACATAATT    1020
       TAGGGAAAAT TGGAAAATAT AGGAAACTTT AAACGAGAAA ATGAAACCTC TCATAATCCC    1080
       ACTGCATAGA AATAACAAGC GTTAACATTT TCATATTTTT TTCTTTCAGT CATTTTTCTA    1140
       TTTGTGGTAT ATGTATATAT GTACCTATAT GTATTTGCAT TTGAAATTTT GGAATCCTGC    1200
  5    TCTATGTACA GTTTTGTATT ATACTTTTTA AATCTTGAAC TTTATAAACA TTTTCTGAAA    1260
       TCATTGATTA TTCTACAAAA ACATGATTTT AAACAGCTGT AAAATATTCT ATGATATGAA    1320
       TGTTTTATGC ATTATTTAAG CCTGTCTCTA TTGTTGGAAT TTCAGGTCAT TTTCATAAAT    1380
       ATTGTTGCAA TAAATATCCT TGAACACACA AAAAAAAAAA AA
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  10   Seq ID NO: 292 Protein sequence
       Protein Accession #: Eos sequence


       1          11         21         31         41         51
       |          |          |          |          |          |
  15   MIILIYLFLL LWEDTQGWGF KDGIFHNSIW LERAAGVYHR EARSGKYKLT YAEAKAVCEF    60
       EGGHLATYKQ LEAARKIGFH VCAAGWMAKG RVGYPIVKPG PNCGFGKTGI IDYGIRLNRS    120
       ERWDAYCYNP HAKECGGVFT DPKQIFKSPG FPNEYEDNQI CYWHIRLKYG QRIHLSFLDF    180
       DLEDDPGCLA DYVEIYDSYD DVHGFVGRYC GDELPDDIIS TGNVMTLKFL SDASVTAGGF    240
  20   QIKYVAMDPV SKSSQGKNTS TTSTGNKNFL AGRFSHL
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       Seq ID NO: 293 DNA sequence
       Nucleic Acid Accession #: NM_007115.1
       Coding sequence: 69..902

  25   1          11         21         31         41         51
       |          |          |          |          |          |
       GAATTCGCAC TGCTCTGAGA ATTTGTGAGC AGCCCCTAAC AGGCTGTTAC TTCACTACAA    60
       CTGACGATAT GATCATCTTA ATTTACTTAT TTCTCTTGCT ATGGGAAGAC ACTCAAGGAT    120
       GGGGATTCAA GGATGGAATT TTTCATAACT CCATATGGCT TGAACGAGCA GCCGGTGTGT    180
  30   ACCACAGAGA AGCACGGTCT GGCAAATACA AGCTCACCTA CGCAGAAGCT AAGGCGGTGT    240
       GTGAATTTGA AGGCGCCAT CTCGCAACTT ACAAGCAGCT AGAGGCAGCC AGAAAAATTG    300
       GATTTCATGT CTGTGCTGCT GGATGGATGG CTAAGGGCAG AGTTGGATAC CCCATTGTGA    360
       AGCCAGGGCC CAACTGATGA TTTGGAAAAA CTGGCATTAT TGATTATGGA ATCCGTCTCA    420
       ATAGGAGTGA AAGATGGGAT GCCTATTGCT ACAACCCACA CGCAAAGGAG TGTGGTGGCG    480
  35   TCTTTACAGA TCCAAAGCGA ATTTTTAAAT CTCCAGGCTT CCCAAATGAG TACGAAGATA    540
       ACCAAATCTG CTACTGGCAC ATTAGACTCA AGTATGGTCA GCGTATTCAC CTGAGTTTTT    600
       TAGATTTTGA CCTTGAAGAT GACCCAGGTT GCTTGGCTGA TTATGTTGAA ATATATGACA    660
       GTTACGATGA TGTCCATGGC TTTGTGGGAA GATACTGTGG AGATGAGCTT CCAGATGACA    720
       TCATCAGTAC AGGAAATGTC ATGACCTTGA AGTTTCTAAG TGATGCTTCA GTGACAGCTG    780
  40   GAGGTTTCCA AATCAAATAT GTTGCAATGG ATCCTGTATC CAAATCCAGT CAAGGAAAAA    840
       ATACAAGTAC TACTTCTACT GGAAATAAAA ACTTTTTAGC TGGAAGATTT AGCCACTTAT    900
       AAAAAAAAAA AAGGATGATC AAAACACACA GTGTTTATGT TGGAATCTTT TGGAACTCCT    960
       TTGATCTCAC TGTTATTATT AACATTTATT TATTATTTTT CTAAATGTGA AAGAAATACA    1020
       TAATTTAGGG AAAATTGGAA AATATAGGAA ACTTTAAACG AGAAAATGAA ACCTCTCATA    1080
  45   ATCCCACTGC ATAGAAATAA CAAGCGTTAA CATTTTCATA TTTTTTTCTT TCAGTCATTT    1140
       TTGTATTTGT GGTATATGTA TATATGTACC TATATGTATT TGCATTTGAA ATTTTGGAAT    1200
       CCTGCTCTAT GTACAGTTTT GTATTATACT TTTTAAATCT TGAACTTTAT GAACATTTTC    1260
       TGAAATCATT GATTATTCTA CAAAAACATG ATTTTAAACA GCTGTAAAAT ATTCTATGAT    1320
       ATGAATGTTT TATGCATTAT TTAAGCCTGT CTCTATTGTT GGAATTTCAG GTCATTTTCA    1380
  50   TAAATATTGT TGCAATAAAT ATCCTTCGGA ATTC
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       Seq ID NO: 294 Protein sequence
       Protein Accession #: NP_009046.1

  55   1          11         21         31         41         51
       |          |          |          |          |          |
       MIILIYLFLL LWEDTQGWGF KDGIFHNSIW LERAAGVYHR EARSGKYKLT YAEAKAVCEF    60
       EGGHLATYKQ LEAARKIGFH VCAAGWMAKG RVGYPIVKPG PNXXFGKTGI IDYGIRLNRS    120
       ERWDAYCYNP HAKECGGVFT DPKRIFKSPG FPNEYEDNQI CYWHIRLKYG QRIHLSFLDF    180
  60   DLEDDPGCLA DYVEIYDSYD DVHGFVGRYC GDELPDDIIS TGNVMTLKFL SDASVTAGGF    240
       QIKYVAMDPV SKSSQGKNTS TTSTGNKNFL AGRFSHL
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       Seq ID NO: 295 DNA sequence
  65   Nucleic Acid Accession #: NM_001218.2
       Coding sequence: 116..1180


       1          11         21         31         41         51
       |          |          |          |          |          |
  70   GTACTCGCCA CGGCACCCAG GCTGCGCGCA CGCGGTCCCG GTGTGCAGCT GGAGAGCGAG    60
       CGGCCACCGG GAGCCCCGG CACAGCCCGC GCCCGCCCCG CAGGAGCCCG CGAAGATGCC    120
       CCGGCGCAGC CTGCACGCGG CGGCCGTGCT CCTGCTGGTG ATCTTAAAGG AACAGCCTTC    180
       CAGCCCGGCC CCAGTGAACG GTTCCAAGTG GACTTATTTT GGTCCTGATG GGAGAAATAG    240
       CTGGTCCAAG AAGTACCCGT CGTGTGGGGG CCTGCTGCAG TCCCCCATAG ACCTGCACAG    300
  75   TGACATCCTC CAGTATGACG CCAGCCTCAC GCCCCTCGAG TTCCAAGGCT ACAATCTGTC    360
       TGCCAACAAG CAGTTTCTCC TGACCAACAA TGGCCATTCA GTGAAGCTGA ACCTGCCCTC    420
       GGACATGCAC ATCCAGGGCG TCCAGTCTCG CTACAGTGCC ACGCAGCTGC ACCTGCACTG    480
       GGGGAACCCG AATGACCCGC ACGGCTCTGA GCACACCGTC AGCGGACAGC ACTTCGCCGC    540
       CGAGCTGCAC ATTGTCCATT ATAACTCAGA CCTTTATCCT GACGCCAGCA CTGCCAGCAA    600
  80   CAAGTCAGAA GGCTCGCTG TCCTGGCTGT TCTCATTGAG ATGGGCTCCT TCAATCCGTC    660
       CTATGACAAG ATCTTCAGTC ACCTTCAACA TGTAAAGTAC AAAGGCCAGG AAGCATTCGT    720
       CCCGGGATTC AACATTGAAG AGCTGCTTCC GGAGAGGACC GCTGAATATT ACCGCTACCG    780
       GGGGTCCCTG ACCACACCCC CTTGCAACCC CACTGTGCTC TGGACAGTTT CCGAAACCCC    840
       CGTGCAAATT TCCCAGGAGC AGCTGCTGGC TTTGGAGACA GCCCTGTACT GCACACACAT    900
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          GGACGACCCT TCCCCCAGAG AAATGATCAA CAACTTCCGG CAGGTCCAGA AGTTCGATGA    960
          GAGGCTGGTA TACACCTCCT TCTCCCAAGT GCAAGTCTGT ACTGCGGCAG GACTGAGTCT   1020
          GGGCATCATC CTCTCACTGG CCCTGGCTGG CATTCTTGGC ATCTGTATTG TGGTGGTGGT   1080
 5        GTCCATTTGG CTTTTCAGAA GGAAGAGTAT CAAAAAAGGT GATAACAAGG GAGTCATTTA   1140
          CAAGCCAGCC ACCAAGATGG AGACTGAGGC CCACGCTTGA GGTCCCCGGA GCTCCCGGGC   1200
          ACATCCAGGA AGGACCTTGC TTTGGACCCT ACACACTTCG GCTCTCTGGA CACTTGCGAC   1260
          ACCTCAAGGT GTTCTCTGTA GCTCAATCTG CAAACATGCC AGGCCTCAGG GATCCTCTGC   1320
          TGGGTGCCTC CTTGCCTTGG GACCATGGCC ACCCCAGAGC CATCCGATCG ATGGATGGGA   1380
 10       TGCACTCTCA GACCAAGCAG CAGGAATTCA AAGCTGCTTG CTGTAACTGT GTGAGATTGT   1440
          GAAGTGGTCT GAATTCTGGA ATCACAAACC AAGCCATGCT GGGTGGGCCAT TAATGGTTGG   1500
          AAAACACTTT CATCCGGGGC TTTGCCAGAG CGTGCTTTCA AGTGTCCTGG AAAGTCTGCT   1560
          GCTTCTCCAA GCTTTCAGAC AAGAATGTGC ACTCTCTGCT TAGGTTTTGC TTGGGAAACT   1620
          CAACTTCTTT CCTCTGGAGA CGGGGCATCT CCCTCTGATT TCCTTCTGCT ATGACAAAAC   1680
 15       CTTTAATCTG CACCTTACAA CTCGGGGACA AATGGGGACA GGAAGGATCA AGTTGTAGAG   1740
          AGAAAAAAGA AAACAAGAGA TATACATTGT GATATATTAG GGACACTTTC ACAGTCCTGT   1800
          CCTCTGGATC ACAGACACTG CACAGACCTT AGGGAATGGC AGGTTCAAGT TCCACTTCTT   1860
          GGTGGGGATG AGAAGGGAGA GAGAGCTAGA GGGACAAAGA GAATGAGAAG ACATGGATGA   1920
          TCTGGGAGAG TCTCACTTTG GAATCAGAAT TGGAATCACA TTCTGTTTAT CAAGCCATAA   1980
 20       TGTAAGGACA GAATAATACA ATATTAAGTC CAAATCCAAC CTCCTGTCAG TGGAGCAGTT   2040
          ATGTTTTATA CTCTACAGAT TTTACAAATA ATGAGGCTGT TCCTTGAAAA TGTGTTGTTG   2100
          CTGTGTCCTG GAGGAGACAT GAGTTCCGAG ATGACCCAAT CTGCCTTTGA ATCTGGAGGA   2160
          AATAGGCAGA AACAAAATGA CTGTAGAACT TATTCTCTGT AGGCCAAATT TCATTTCAGC   2220
          CACTTCTGCA GGATCCCTAC TGCCAACCTG GAATGGAGAC TTTTATCTAC TTCTCTCTCT   2280
 25       CTGAAGATGT CAAATCGTGG TTTAGATCAA ATATATTTCA AGCTATAAAA GCAGGAGGTT   2340
          ATCTGTGCAG GGGGCTGGCA TCATGTATTT AGGGGCAAGT AATAATGGAA TGCTACTAAG   2400
          ATACTCCATA TTCTTCCCCG AATCACACAG ACAGTTTCTG ACAGGCGCAA CTCCTCCATT   2460
          TTCCTCCCGC AGGTGAGAAC CCTGTGGAGA TGAGTCAGTG CCATGACTGA GAAGGAACCG   2520
          ACCCCTAGTT GAGAGCACCT TGCAGTTCCC CGAGAACTTT CTGATTCACA GTCTCATTTT   2580
 30       GACAGCATGA AATGTCCTCT TGAAGCATAG CTTTTTAAAT ATCTTTTTCC TTCTACTCCT   2640
          CCCTCTGACT CTAAGAATTC TCTCTTCTGG AATCGCTTGA ACCCAGGAGG CGGAGGTTGC   2700
          AGTAAGCCAA GGTCATGCCA CTGCACTCTA GCCTGGGTGA CAGAGCGAGA CTCCATCTCA   2760
          AAAAAAAAAA AAAAA
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Seq ID NO: 296 Protein sequence
Protein Accession #: NP_001209.1

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          1         11        21        31        41        51
          |         |         |         |         |         |
          MPRRSLHAAA VLLLVILKEQ PSSPAPVNGS KWTYFGPDGE NSWSKKYPSC GGLLQSPIDL    60
          HSDILQYDAS LTPLEFQGYN LSANKQFLLT NNGHSVKLNL PSDMHIQGLQ SRYSATQLHL   120
          HWGNPNDPHG SEHTVSGQHF AAELHIVHYN SDLYPDASTA SNKSEGLAVL AVLIEMGSFN   180
          PSYDKIFSHL QHVKYKGQEA FVPGFNIEEL LPERTAEYYR YRGSLTTPPC NPTVLWTVFR   240
          NPVQISQEQL LALETALYCT HMDDPSPREM INNFRQVQKF DERLVYTSFS QVQVCTAAGL   300
          SLGIILSLAL AGILGICIVV VVSIWLFRRK SIKKGDNKGV IYKPATKMET EAHA
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Seq ID NO: 297 DNA sequence
Nucleic Acid Accession #: NM_006632.1
Coding sequence: 377..1582

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          1         11        21        31        41        51
          |         |         |         |         |         |
          ACGCGTCCGC CCACGCGTCC GCCCACGCGT CCGGTCGGGG CCAGAGCGCA GGTGTACCTG  . 60
          GCGGCCGTGC TGGAGCACCT GACGGCCGAG ATCCTGGAGC TGGCTGGCAA CCCGGCCCGC   120
          GACAAGAAGA CCCGCATCAT CCTGCGCCAC CTGTAGCTGG CCATTCGCAA CGGCGGAGGAG   180
 55       CTTAACAAGC TGCTGGGCGA AGTCACCATC GCGCAGGGCG GTGTCCTGCC CAACATTCAG   240
          GGCGTGCTTC TGCCCCAGAA GACCAAGAGC CACCACAAGG CCAAGGGTGA AAACCATTCA   300
          CTAGGAGAGG AGAAACACAA TGGCCACCAA GACAGAGTTG AGTCCCACAG CAAGGGAGAG   360
          CAAGAACGCA CAAGATATGC AAGTGGATGA GACACTGATC CCCAGGAAAG GTCCAAGTTT   420
          ATGTTCTGCT CGCTATGGAA TAGCCCTCGT CTTACATTTC TGCAATTTCA CAACGATAGC   480
 60       ACAAAATGTC ATCATGAACA TCACCATGGT AGCCATGGTC AACAGCACAA GCCCTCAATC   540
          CCAGCTCAAT GATTCCTCTG AGGTGCTGCC TGTTGACTCA TTTGGTGGCC TAAGTAAAGC   600
          CCCAAAGAGT CTTCCTGCAA AGTCCTCAAT ACTTGGGGGT CAGTTTGCAA TTTGGGAAAA   660
          GTGGGGCCCT CCACAAGAAC GAAGCAGACT CTGCAGCATT GCTTTATCAG GAATGTTACT   720
          GGGATGCTTT ACTGCCATCC TCATAGGTGG CTTCATTAGT GAAACCCTTG GGTGGCCCTT   780
 65       TGTCTTCTAT ATCTTTGGAG GTGTTGGCTG TGTCTGCTGC CTTCTCTGGT TTGTTGTGAT   840
          TTATGATGAC CCCTTTTCCT ATCCATGGAT AAGCACCTCA GAAAAAGAAT ACATCATATC   900
          CTCCTTGAAA CAACAGGTCG GGTCTTCTAA GCAGCCTCTT CCCATCAAAG CTATGCTCAG   960
          ATCTCTACCC ATTTGGTCCA TATGTTTAGG CTGTTTCAGC CATCAATGGT TAGTTAGCAC  1020
          AATGGTTGTA TACATACCAA CTTACATCAG CTCTGTGTAC CATGTTAACA TCAGAGACAA  1080
 70       TGGACTTCTA TCTGCCCTTC CTTTTATTGT TGCCTGGGTC ATAGGCATGG TGGGAGGCTA  1140
          TCTGGCAGAT TTCCTTCTAA CCAAAAAGTT TAGACTCATC ACTGTGAGGA AAATTGCCAC  1200
          AATTTTAGGA AGTCTCCCCT CTTCAGCACT CATTGTGTCT CTGCCTTACC TCAATTCCGG  1260
          CTATATCACA GCAACTGCCT TGCTGACGCT CTCTTGCGGA TTAAGCACAT TGTGTCAGTC  1320
 75       AGGGATTTAT ATCAATGTCT TAGATATTGC TCCAAGGTAT TCCAGTTTTC TCATGGGAGC  1380
          ATCAAGAGGA TTTTCGAGCA TAGCACCTGT CATTGTACCC ACTGTCAGCG GATTTCTTCT  1440
          TAGTCAGGAC CCTGAGTTTG GGTGGAGGAA TGTCTTCTTC TTGCTGTTTG CCGTTAACCT  1500
          GTTAGGACTA CTCTTCTACC TCATATTTGG AGAAGCAGAT GTCCAAGAAT GGGCTAAAGA  1560
          GAGAAAACTC ACTCGTTTAT GAAGTTATCC CACCTTGGAT GGAAAAGTCA TTAGGCACCG  1620
          TATTGCATAA AATAGAAGGC TTCCGTGATG AAAATACCAG TGAAAGATT TTTTTTTCCT  1680
 80       GTGGCTCTTT TCAATTATGA GATCAGTTCA TTATTTTATT CAGACTTTTT TTTGAGAGAA  1740
          ATGTAAGATG AATAAAAATT CAAATAAAAT GATAACTAAG AAAAAAAAAA AAAAA  ·
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Seq ID NO: 298 Protein sequence
Protein Accession #: NP_006623.1

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      1         11        21        31        41        51
      |         |         |         |         |         |
      MQVDETLIPR KGPSLCSARY GIALVLHFCN FTTIAQNVIM NITMVAMVNS TSPQSQLNDS    60
      SEVLPVDSFG GLSKAPKSLP AKSSILGGQF AIWEKWGPPQ ERSRLCSIAL SGMLLGCFTA   120
      ILIGGFISET LGWPFVFYIF GGVGCVCCLL WFVVIYDDPF SYPWISTSEK EYIISSLKQQ   180
      VGSSKQPLPI KAMLRSLPIW SICLGCFSHQ WLVSTMVVYI PTYISSVYHV NIRDNGLLSA   240
      LPFIVAWVIG MVGGYLADFL LTKKFRLITV RKIATILGSL PSSALIVSLP YLNSGYITAT   300
      ALLTLSCGLS TLCQSGIYIN VLDIAPRYSS FLMGASRGFS SIAPVIVPTV SGFLLSQDPE   360
      FGWRNVFFLL FAVNLLGLLF YLIFGEADVQ EWAKERKLTR L
```

Seq ID NO: 299 DNA sequence
Nucleic Acid Accession #: NM_003058.1
Coding sequence: 145..1812

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      1         11        21        31        41        51
      |         |         |         |         |         |
      GGCCCTGCCC TGAAGGCTGG TCACTTGCAG AGGTAAACTC CCCTCTTTGA CTTCTGGCCA    60
      GGGTTTGTGC TGAGCTGGCT GCAGCCGCTC TCAGCCTCGC TCCGGGCACG TCGGGCAGCC   120
      TCGGGCCCTC CTGCCTGCAG GATCATGCCC ACCACCGTGG ACGATGTCCT GGAGCATGGA   180
      GGGGAGTTTC ACTTTTTCCA GAAGCAAATG TTTTTCCTCT TGGCTCTGCT CTCGGCTACC   240
      TTCGCGCCCA TCTACGTGGG CATCGTCTTC CTGGGCTTCA CCCCTGACCA CCGCTGCCGG   300
      AGCCCCGGAG TGGCCGAGCT GAGTCTGCGC TGCGGCTGGA GTCCTGCAGA GGAACTGAAC   360
      TACACGGTGC CGGGCCCAGG ACCTGCGGGC GAAGCCTCCC CAAGACAGTG TAGGCGCTAC   420
      GAGGTGGACT GGAACCAGAG CACCTTTGAC TGCGTGGACC CCCTGGCCAG CCTGACACAC   480
      AACAGGAGCC GCCTGCCACT GGGCCCCTGC CGGGACGGCT GGGTGTACGA GACGCCTGGC   540
      TCGTCCATCG TCACCGAGTT TAACCTGGTA TGTGCCAACT CCTGGATGCT GGACCTATTC   600
      CAGTCATCAG TGAATGTAGG ATTCTTTATT GGCTCTATGA GTATCGGCTA CATAGCAGAC   660
      AGGTTTGGCC GTAAGCTCTG CCTCCTAACT ACAGTCCTCA TAAATGCTGC AGCTGGAGTT   720
      CTCATGGCCA TTTCCCCAAC CTATACGTGG ATGTTAATTT TTCGCTTAAT CCAAGGACTG   780
      GTCAGCAAAG CAGGCTGGTT AAATAGGCTAC ATCCTGATTA CAGAATTTGT TGGGCGGAGA   840
      TATCGGAGAA CAGTGGGGAT TTTTTACCAA GTTGCCTATA CAGTTGGGCT CCTGGTGCTA   900
      GCTGGGGGTG CTTACGCACT TCCTCACTGG AGGTGGTTGC AGTTCACAGT TGCTCTGCCC   960
      AACTTCTTCT TCTTGCTCTA TTACTGGTGC ATACCTGAGT CTCCCAGGTG GCTGATCTCC  1020
      CAGAATAAGA ATGCTGAAGC CATGAGAATC ATTAAGCACA TCGCAAAGAA AAATGGAAAA  1080
      TCTCTACCCG CCTCCCCTTCA GCGCCTGAGA CTTGAAGAGG AAACTGGCAA GAAATTGAAC  1140
      CCTTCATTTC TTGACTTGGT CAGAACTCCT CAGATAAGGA AACATACTAT GATATTGATG  1200
      TACAACTGGT TCACGAGCTC TGTGCTCTAC CAGGGCCTCA TCATGCACAT GGGCCTTGCA  1260
      GGTGACAATA TCTACCTGGA TTTCTTCTAC TCTGCCCTGG TTGAATTCCC AGCTGCCTTC  1320
      ATGATCATCC TCACCATCGA CCGCATCGGA CGCCGTTACC CTTGGGCTGC ATCAAATATG  1380
      GTTGCAGGGG CAGCCTGTCT GGCCTCAGTT TTTATACCTG GTGATCTACA ATGGCTAAAA  1440
      ATTATTATCT CATGCTTGGG AAGAATGGGG ATCACAATGG CCTATGAGAT AGTCTGCCTG  1500
      GTCAATGCTG AGCTGTACCC CACATTCATT AGGAATCTTG GCGTCCACAT CTGTTCCTCA  1560
      ATGTGTGACA TTGGTGGCAT CATCACGCCA TTCCTGGTCT ACCGGCTCAC TAACATCTGG  1620
      CTTGAGCTCC CGCTGATGGT TTTTCGGCGTA CTTGGCTTGG TTGCTGGAGG TCTGGTGCTG  1680
      TTGCTTCCAG AAACTAAAGG GAAAGCTTTG CCTGAGACCA TCGAGGAAGC CGAAAATATG  1740
      CAAAGACCAA GAAAAAATAA AGAAAAGATG ATTTACCTCC AAGTTCAGAA ACTAGACATT  1800
      CCATTGAACT AAGAAGAGAG ACCGTTGCTG CTGTCATGAC CTAGCTTTGA TGGCAGCAAG  1860
      ACCAAAAGTA GAAATCCCTG CACTCATCAC AAAGCCCATA CAACTCAACC AAACTTACCC  1920
      CTGAGCCCTA TCAACCTAGG TCTACAGCCA GTGGAGTCTA TTGTACACTG TGGAAAAATA  1980
      CCCATGGGAC CAGATCCTGC CAAATTCTTC CAGCTCACTT TATTCTCAGC ATTCCTAGGA  2040
      CATTGGACAT TGGTTTTCTG GAGGGTTTTT TTTCCGATCT TTGTATTTTT TTAAATTTGA  2100
      TTCTTTTCTT TGCAATGCTA GCAACCAGAA TACATAGGGG AACTGTGGGC TAGGCAAANA  2160
      AAATAGAAAA AGTGTGAAAA ACAGTAAAGT TGGGAGAGGA GCATCTATTT TCTTAAAGAA  2220
      ATAAAACACC NAAAACAAAA AAAAAAAAAA AAAAAAA
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Seq ID NO: 300 Protein sequence
Protein Accession #: NP_003049.1

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      1         11        21        31        41        51
      |         |         |         |         |         |
      MPTTVDDVLE HGGEFHFFQK QMFFLLALLS ATFAPIYVGI VFLGFTPDHR CRSPGVAELS    60
      LRCGWSPAEE LNYTVPGPGP AGEASPRQCR RYEVDWNQST FDCVDPLASL DTNRSRLPLG   120
      PCRDGWVYET PGSSIVTEFN LVCANSWMLD LFQSSVNVGF FIGSMSIGYI ADRFGRKLCL   180
      LTTVLINAAA GVLMAISPTY TWMLIFRLIQ GLVSKAGWLI GYILITEFVG RRYRRTVGIF   240
      YQVAYTVGLL VLAGVAYALP HWRWLQFTVA LPNFFPLLYY WCIPESPRWL ISQNKNAEAM   300
      RIIKHIAKKN GKSLPASLQR LRLEEETGKK LNPSFLDLVR RHTMI LMYNWFTSSV   360
      LYQGLIMHMG LAGDNIYLDF PYSALVEPPA AFMIILTIDR IGRRYPWAAS NMVAGAACLA   420
      SVFIPGDLQW LKIIISCLGR MGITMAYEIV CLVNAELYPT FIRNLGVHIC SSMCDIGGII   480
      TPFLVYRLTN IWLELPLMVP GVLGLVAGGL VLLLPETKGK ALPETIEEAE NMQRPRKNKE   540
      KMIYLQVQKL DIPLN
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Seq ID NO: 301 DNA sequence
Nucleic Acid Accession #: NM_012206.1
Coding sequence: 52..1131

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      1         11        21        31        41        51
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      GTTACCCAGC ATTGTGAGTG ACAGAGCCTG GATCTGAACG CTGATCCCAT AATGCATCCT    60
      CAAGTGGTCA TCTTAAGCCT CATCCTACAT CTGGCAGATT CTGTAGCTGG TTCTGTAAAG   120
      GTTGGTGGAG AGGCAGGTCC ATCTGTCACA CTACCCTGCC ACTACAGTGG AGCTGTCACA   180
      TCAATGTGCT GGAATAGAGG CTCATGTTCT CTATTCACAT GCCAAAATGG CATTGTCTGG   240
      ACCAATGGAA CCCACGTCAC CTATCGGAAG GACACACGCT ATAAGCTATT GGGGGACCTT   300
      TCAAGAAGGG ATGTCTCTTT GACCCATAGA AAATACACGC TGTCTCTACAG TGGCGTATAT   360
```

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       TGTTGCCGTG TTGAGCACCG TGGGTGGTTC AATGACATGA AAAATCACCGT ATCATTGGAG    420
       ATTGTGCCAC CCAAGGTCAC GACTACTCCA ATTGTCACAA CTGTTCCAAC CGTCACGACT    480
       GTTCGAACGA GCACCACTGT TCCAACGACA ACGACTGTTC CAACGACAAC TGTTCCAACA    540
       ACAATGAGCA TTCCAACGAC AACGACTGTT CCGACGACAA TGACTGTTTC AACGACAACG    600
       AGCGGTTCCAA CGACAACGAG CATTCCAACA ACAACAAGTG TTCCAGTGAC AACAACGGTC    660
       TCTACCTTTG TTCCTCCAAT GCCTTTGCCC AGGCAGAACC ATGAACCAGT AGCCACTTCA    720
       CCATCTTCAC CTCAGCCAGC AGAAACCCAC CCTACGCACAC TGCAGGGAGC AATAAGGAGA    780
       GAACCCACCA GCTCACCATT GTACTCTTAC ACAACAGATG GGAATGACAC CGTGACGAG    840
       TCTTCAGATG GCCTTTGGAA TAACAATCAA ACTCAACTGT TCCTAGAACA TAGTCTACTG    900
       ACGGCCAATA CCACTAAAGG AATCTATGCT GGAGTCTGTA TTTCTGTCTT GGTGCTTCTT    960
       GCTCTTTTGG GTGTCATCAT TGCCAAAAAG TATTTCTTCA AAAAGGAGGT TCAACAACTA   1020
       AGTGTTTCAT TTAGCAGCCT TCAAATTAAA GCTTTGCAAA ATGCAGTTGA AAAGGAAGTC   1080
       CAAGCAGAAG ACAATATCTA CATTGAGAAT AGTCTTTATG CCACGGACTA AGACCCAGTG   1140
       GTGCTCTTTG AGAGTTTACG CCCATGACTG CAGAAGACTG AACAGGTATC AGCACATCAG   1200
       ATGTCTTTTA GACTCCAAGA CAATTTTTCT GTTTCAGTTT CATCTGGCAT TCCAACATGT   1260
       CAGTGATACT GGGTAGAGTA ACTCTCCCAC TCCAAACTGT GTATAGTCAA CCTCATCATT   1320
       AATGTAGTCC TAATTTGTTT TGCTAAAACT GGCTCAATCC TTCTGATCAT TGCAGAGTTT   1380
       TCTCTCAAAC ATGAACACTT TAGAATTGTA TGTTCTCTTT AGACCCCATA AATCCTGTAT
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Seq ID NO: 302 Protein sequence
Protein Accession #: NP_036338.1

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1          11         21         31         41         51
|          |          |          |          |          |
MHPQVVILSL ILHLADSVAG SVKVGGEAGP SVTLPCHYSG AVTSMCWNRG SCSLFTCQNG    60
IVWTNGTHVT YRKDTRYKLL GDLSRRDVSL TIENTAVSDS GVYCCRVEHR GWFNDMKITV   120
SLEIVPPKVT TTPIVTTVPT VTTVRTSTTV PTTTTVPTTT VPTTMSIPTT TTVPTTMTVS   180
TTTSVPTTTS IPTTTSVPVT TTVSTFVPPM PLPRQNHEPV ATSPSSPQPA ETHPTTLQGA   240
IRREPTSSPL YSYTTDGNDT VTESSDGLWN NNQTQLFLEH SLLTANTTKG IYAGVCISVL   300
VLLALLGVII AKKYFFKKEV QQLSVSFSSL QIKALQNAVE KEVQAEDNIY IENSLYATD
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Seq ID NO: 303 DNA sequence
Nucleic Acid Accession #: NM_001044.1
Coding sequence: 129..1991

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AAAGCCCAGG CCCGGGCGGC CAGACCAAGA GGGAAGAAGC ACAGAATTCC TCAACTCCCA   120
GTGTGCCCAT GAGTAAGAGC AAATGCTCCG TGGGACTCAT GTCTTCCGTG GTGGCCCCGG   180
CTAAGGAGCC CAATGCCGTG GGCCCGAAGG AGGTGGAGCT CATCCTTGTC AAGGAGCAGA   240
ACGGAGTGCA GCTCACCAGC TCCACCCTCA CCAACCCGCG GCAGAGCCCC GTGGAGGCCC   300
AGGATCGGGA GACCTGGGGC AAGAAGATCG ACTTTCTCCT GTCCGTCATT GGCTTTGCTG   360
TGGACCTGGC CAACGTCTGG CGGTTCCCCT ACCTGTGCTA CAAAAATGGT GGCGGTGCCT   420
TCCTCGTCCC CTACCTGCTC TTCATGGTCA TTGCTGGGAT GCCACTTTTC TACATGGAGC   480
TGGCCCTCGG CCAGTTCAAC AGGGAAGGGG CCGCTGGTGT CTGGAAGATC TGCCCCATAC   540
TGAAAGGTGT GGGCTTCACG GTCATCCTCA TCTCACTGTA TGTCGGCTTC TTCTACAACG   600
TCATCATCGC CTGGGCGCTG CACTATCTCT TCTCCTCCTT CACCACGGAG CTCCCCTGGA   660
TCCACTGCAA CAACTCCTGG AACAGCCCCA ACTGCTCGGA TGCCCATCCT GGTGACTCCA   720
GTGGAGACAG CTCGGGCCTC AACGACACTT TTGGGACCAC ACCTGCTGCC GAGTACTTTG   780
AACGTGGCGT GCTGCACCTC CACCAGAGCC ATGGCATCGA CGACCTGGGG CCTCCGCGGT   840
GGCAGCTCAC AGCCTGCCTG GTGCTGGTCA TCGTGCTGCT CTACTTCAGC CTCTGGAAGG   900
GCGTGAAGAC CTCAGGGAAG GTGGTATGGA TCACAGCCAC CATGCCATAC GTGGTCCTCA   960
CTGCCCTGCT CCTGCGTGGG GTCACCCTCC CTGGAGCCAT AGACGGCATC AGAGCATACC  1020
TGAGCGTTGA CTTCTACCGG CTCTGCGAGG CGTCTGTTTG GATTGACGCG GCCACCCAGG  1080
TGTGCTTCTC CCTGGGCGTG GGGTTCGGGG TGCTGATCGC CTTCTCCAGC TACAACAAGT  1140
TCACCAACAA CTGCTACAGG GACGCGATTG TCACCACCTC CATCAACTCC CTGACGAGCT  1200
TCTCCTCCGG CTTCGTCGTC TTCTCCTTCC TGGGGTACAT GGCACAGAAG CACAGTGTGC  1260
CCATCGGGGA CGTGGCCAAG GACGGGCCAG GGCTGATCTT CATCATCTAC CCGGAAGCCA  1320
TCGCCACGCT CCCTCTGTCC TCAGCCTGGG CCGTGGTCTT CTTCATCATG CTGCTCACCC  1380
TGGGTATCGA CAGCGCCATG GGTGGTATGG AGTCAGTGAT CACCGGGGTC ATCGATGAGT  1440
TCCAGCTGCT GCACAGACAC CGTGAGCTCT TCACGCTCTT CATCGTCCTG GCGACCTTCC  1500
TCCTGTCCCT GTTCTGCGTC ACCAACGGTG GCATCTACGT CTTCACGCTC CTGGACCATT  1560
TTGCAGCCGG CACGTCCATC CTCTTTGGAG TGCTCATCGA AGCCATCGGA GTGGCCTGGT  1620
TCTATGGTGT TGGGCAGTTC AGCGACGACA TCCAGCAGAT GACCGGGCAG CGGCCCAGCC  1680
TGTACTGGCG GCTGTGCTGG AAGCTGGTCA GCCCCTGCTT TCTCCTGTTC GTGGTCGTGG  1740
TCAGCATTGT GACCTTCAGA CCCCCCCACT ACGGAGCCTA CATCTTCCCC GACTGGGCCA  1800
ACGCGCTGGG CTGGGTCATC GCCACATCCT CCATGGCCAT GGTGCCCATC TATGCGGCCT  1860
ACAAGTTCTG CAGCCTGCCT GGGTCCTTTC GAGAGAAACT GGCCTACGCG ATTGCACCCG  1920
AGAAGGACCG TGAGCTGGTG GACAGAGGGG AGGTGCGCCA GTTCACGCTC CGCCACTGGC  1980
TCAAGGTGTA GAGGGAGCAG AGACGAAGAC CCCAGGAAGT CATCCTGCAA TGGGAGAGAC  2040
ACGAACAAAC CAAGGAAATC TAAGTTTCGA GAGAAAGGAG GGCAACTTCT ACTCTTCAAC  2100
CTCTACTGAA AACACAAACA ACAAAGCAGA AGACTCCTCT CTTCTGACTG TTTACACCTT  2160
TCCGTGCCGG GAGCGCACCT CGCCGTGTCT TGTGTTGCTG TAATAACGAC GTAGATCTGT  2220
GCAGCGAGGT CCACCCCGTT GTTGTCCCTG CAGGGCAGAA AAACGTCTAA CTTCATGCTG  2280
TCTGTGTGAG GCTCCCTCCC TCCCTGCTCC CTGCTCCCGG CTCTGAGGCT GCCCCAGGGG  2340
CACTGTGTTC TCAGGCGGGG ATCACGATCC TTGTAGACGC ACCTGCTGAG AATCCCCGTG  2400
CTCACAGTAG CTTCCTAGAC CATTTACTTT GCCCATATTA AAAAGCCAAG TGTCCTGCTT  2460
GGTTTAGCTG TGCAGAAGGT GAAATGGAGG AAACCACAAA TTCATGCAAA GTCCTTTCCC  2520
GATGCGTGGC TCCCAGCAGA GGCCGTAAAT TGAGCGTTCA GTTGACACAT TGCACACACA  2580
GTCTGTTCAG AGGCATTGGA GGATGGGGGT CCTGGTATGT CTCACCAGGA AATTCTGTTT  2640
ATGTTCTTGC AGCAGAGAGA AATAAAACTC CTTGAAACCA GCTCAGGCTA CTGCCACTCA  2700
GGCAGCCTGT GGGTCCTTGT GGTGTAGGGA ACGGCCTGAG AGGAGCGTGT CCTATCCCCG  2760
GACGCATGCA GGGCCCCCAC AGGAGCGTGT CCTATCCCCG GACGCATGCA GGGCCCCCAC  2820
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AGGAGCATGT CCTATCCCTG GACGCATGCA GGGCCCCCAC AGGAGCGTGT ACTACCCCAG 2880
AACGCATGCA GGGCCCCCAC AGGAGCGTGT ACTACCCCAG GACGCATGCA GGGCCCCCAC 2940
TGGAGCGTGT ACTACCCCAG GACGCATGCA GGGCCCCCAC AGGAGCGTGT CCTATCCCCG 3000
GACCGGACGC ATGCAGGGCC CCCACAGGAG CGTGTACTAC CCCAGGACGC ATGCAGGGCC 3060
CCCACAGGAG CGTGTACTAC CCCAGGATGC ATGCAGGGCC CCCACAGGAG CGTGTACTAC 3120
CCCAGGACGC ATGCAGGGCC CCCATGCAGG CAGCCTGCAG ACCAACACTC TGCCTGGCCT 3180
TGAGCCGTGA CCTCCAGGAA GGGACCCCAC TGGAATTTTA TTTCTCTCAG GTGCGTGCCA 3240
CATCAATAAC AACAGTTTTT ATGTTTGCGA ATGGCTTTTT AAAATCATAT TTACCTGTGA 3300
ATCAAAACAA ATTCAAGAAT GCAGTATCCG CGAGCCTGCT TGCTGATATT GCAGTTTTTG 3360
TTTACAAGAA TAATTAGCAA TACTGAGTGA AGGATGTTGG CCAAAAGCTG CTTTCCATGG 3420
CACACTGCCC TCTGCCACTG ACAGGAAAGT GGATGCCATA GTTTGAATTC ATGCCTCAAG 3480
TCGGTGGGCC TGCCTACGTG CTGCCCGAGG GCAGGGGCCG TGCAGGGCCA GTCATGGCTC 3540
TCCCCTGCAA GTGGACGTGG GCTCCAGGGA CTGGAGTGTA ATGCTCGGTG GGAGCCGTCA 3600
GCCTGTGAAC TGCCAGGCAG CTGCAGTTAG CACAGAGGAT GGCTTCCCCA TTGCCTTCTG 3660
GGGAGGGACA CAGAGGACGG CTTCCCCATC GCCTTCTGGC CGCTGCAGTC AGCACAGAGA 3720
GCGGCTTCCC CATTGCCTTC TGGGGAGGGA CACAGAGGAC AGTTTCCCCA TCGCCTTCTG 3780
GTTGTTGAAG ACAGCACAGA GAGCGGCTTC CCCATCGCCT TCTGGGGAGG GGCTCCGTGT 3840
AGCAACCCAG GTGTTGTCCG TGTCTGTTGA CCAATCTCTA TTCAGCATCG TGTGGGTCCC 3900
TAAGCACAAT AAAAGACATC CACAATGGAA AAAAAAAAAG GAATTC
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Seq ID NO: 304 <u>Protein sequence</u>
Protein Accession #: NP_001035.1

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1         11        21        31        41        51
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MSKSKCSVGL MSSVVAPAKE PNAVGPKEVE LILVKEQNGV QLTSSTLTNP RQSPVEAQDR   60
ETWGKKIDFL LSVIGFAVDL ANVWRPPYLC YKNGGGAFLV PYLLFMVIAG MPLFYMELAL  120
GQFNREGAAG VWKICPILKG VGFTVILISL YVGFFYNVII AWALHYLFSS FTTELPWIHC  180
NNSWNSPNCS DAHPGDSSGD SSGLNDTFGT TPAAEYFERG VLHLHQSHGI DDLGPPRWQL  240
TACLVLVIVL LYFSLWKGVK TSGKVVWITA TMPYVVLTAL LLRGVTLPGA IDGIRAYLSV  300
DFYRLCEASV WIDAATQVCF SLGVGFGVLI AFSSYNKFTN NCYRDAIVTT SINSLTSFSS  360
GFVVFSFLGY MAQKHSVPIG DVAKDGPGLI FIIYPEAIAT LPLSSAWAVV FFIMLLTLGI  420
DSAMGGMESV ITGLIDEFQL LHRHRELFTL FIVLATPLLS LFCVTNGGIY VFTLLDHFAA  480
GTSILFGVLI EAIGVAWFYG VGQFSDDIQQ MTGQRPSLYW RLCWKLVSPC FLLFVVVVSI  540
VTFRPPHYGA YIFPDWANAL GWVIATSSMA MVPIYAAYKF CSLPGSFREK LAYAIAPEKD  600
RELVDRGEVR QFTLRHWLKV
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Seq ID NO: 305 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001216.1
Coding sequence: 43..1422

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1         11        21        31        41        51
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GCCCGTACAC ACCGTGTGCT GGGACACCCC ACAGTCAGCC GCATGGCTCC CCTGTGCCCC   60
AGCCCCTGGC TCCCTCTGTT GATCCCGGCC CCTGCTCCAG GCCTCACTGT GCAACTGCTG  120
CTGTCACTGC TGCTTCCTGAT GCCTGTCCAT CCCCAGAGGT TGCCCCGGAT GCAGGAGGAT  180
TCCCCCTTGG GAGGAGGCTC TTCTGGGGAA GATGACCCAC TGGGCGAGGA GGATCTGCCC  240
AGTGAAGAGG ATTCACCCAG AGAGGAGGAT CCACCCGGAG AGGAGGATCT ACCTGGACAG  300
GAGGATCTAC CTGGAGAGGA GGATCTACCT GAAGTTAAGC CTAAATCAGA AGAAGAGGGC  360
TCCCTGAAGT TAGAGGATCT ACCTACTGTT GAGGCTCCTG GAGATCCTCA AGAACCCCAG  420
AATAATGCCC ACAGGGACAA AGAAGGGGAT GACCAGAGTC ATTGGCGCTA TGGAGGCGAC  480
CCGGCCCTGGC CCCAGGGTGTC CCCAGCCTGC GCGGGCCGCT TCCAGTCCCC GGTGGATATC  540
CGCCCCCAGC TCGCCGCCTT CTGCCCGGCC CTGCGCCCCC TGGAACTCCT GGGCTTCCAG  600
CTCCCGCCGC TCCCAGAACT GCGGCTGCGC AACAATGGCC ACAGTGTGCA ACTGACCCTG  660
CCTCCTGGGC TAGAGATGGC TCTGGGTCCC GGGCGGGAGT ACCGGGCTCT GCAGCTGCAT  720
CTGCACTGGG GGCTGCAGG TCGTCCGGGC TCGGAGCACA CTGTGGAAGG CCACCGTTTC  780
CCTGCCGAGA TCCACGTGGT TCACCTCAGC ACCGCCTTTG CCAGAGTTGA CGAGGCCTTG  840
GGGCGCCCGG GAGGCCTGGC CGTGTTGGCC GCCTTTCTGG AGGAGGGCCC GGAAGAAAAC  900
AGTGCCTATG AGCAGTTGCT GTCTCGCTTG GAAGAAATCG CTGAGGAAGG CTCAGAGACT  960
CAGGTCCCAG GACTGGACAT ATCTGCACTC CTGCCCTCTG ACTTCAGCCG CTACTTCCAA 1020
TATGAGGGGT CTCTGACTAC ACCGCCCTGT GCCCAGGGTG TCATCTGGAC TGTGTTTAAC 1080
CAGACAGTGA TGCTGAGTGC TAAGCAGCTC CACACCCTCT CTGACACCCT GTGGGGACCT 1140
GGTGACTCTC GGCTACAGCT GAACTTCCGA GCGACGCAGC CTTTGAATGG GCGAGTGATT 1200
GAGGCCTCCT TCCCTGCTGG AGTGGACAGC AGTCCTCGGG CTGCTGAGCC AGTCCAGCTG 1260
AATTCCTGCC TGGCTGCTGG TGACATCCTA GCCCTGGTTT TTGGCCTCCT TTTTGCTGTC 1320
ACCAGCGTCG CGTTCCTTGT GCAGATGAGA AGGCAGCACA GAAGGGGAAC CAAAGGGGGT 1380
GTGAGCTACC GCCCAGCAGA GGTAGCCGAG ACTGGAGCCT GA AGGGCTGGA TCTTGGAGAA 1440
TGTGAGAAGC CAGCCAGAGG CATCTGAGGG GGAGCCGGTA ACTGTCCTGT CCTGCTCATT 1500
ATGCCACTTC CTTTTAACTG CCAAGAAATT TTTTAAAATA AATATTTATA AT
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Seq ID NO: 306 <u>Protein sequence</u>
Protein Accession #: NP_001207.1

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1         11        21        31        41        51
|         |         |         |         |         |
MAPLCPSPWL PLLIPAPAPG LTVQLLLSLL LLMPVHPQRL PRMQEDSPLG GGSSGEDDPL   60
GEEDLPSEED SPREEDPPGE EDLPGEEDLP GEEDLPEVKP KSEEEGSLKL EDLPTVEAPG  120
DPQEPQNNAH RDKEGDDQSH WRYGGDPPWP RVSPACAGRF QSPVDIRPQL AAFCPALRPL  180
ELLGFQLPPL PELRLRNNGH SVQLTLPPGL EMALGPGREY RALQLHLHWG AAGRPGSEHT  240
VEGHRFPAEI HVVHLSTAFA RVDEALGRPG GLAVLAAFLE EGPEENSAYE QLLSRLEEIA  300
EEGSETQVPG LDISALLPSD FSRYFQYEGS LTTPPCAQGV INTVFNQTVM LSAKQLHTLS  360
DTLWGPGDSR LQLNFRATQP LNGRVIEASF PAGVDSSPRA AEPVQLNSCL AAGDILALVF  420
GLLPAVTSVA FLVQMRRQHR RGTKGGVSYR PAEVAETGA
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Seq ID NO: 307 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_003039.1
Coding sequence: 76..1581

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CCTTCCAGAG CAAGCATGGA GCAACAGGAT CAGAGCATGA AGGAAGGGAG GCTGACGCTT   120
GTGCTTGCCC TGGCAACCCT GATAGCTGCC TTTGGGTCAT CCTTCCAGTA TGGGTACAAC   180
GTGGCTGCTG TCAACTCCCC AGCACTGCTC ATGCAACAAT TTTACAATGA GACTTACTAT   240
GGTAGGACCG GTGAATTCAT GGAAGACTTC CCCTTGACGT TGCTGTGGTC TGTAACCGTG   300
TCCATGTTTC CATTTGGAGG GTTTATCGGA TCCCTCCTGG TCGGCCCCTT GGTGAATAAA   360
TTTGGCAGAA AAGGGGCCTT GCTGTTCAAC AACATATTTT CTATCGTGCC TGCGATCTTA   420
ATGGGATGCA GCAGAGTCGC CACATCATTT GAGCTTATCA TTATTTCCAG ACTTTTGGTG   480
GGAATATGTG CAGGTGTATC TTCCAACGTG GTCCCCATGT ACTTAGGGGA GCTGGCCCCT   540
AAAAACCTGC GGGGGGCTCT CGGGGTGGTG CCCCAGCTCT TCATCACTGT TGGGCATCGTT   600
GTGGCCCAGA TCTTTGGTCT TCGGAATCTC CTTGCAAACG TAGATGGCTG GCCGATCCTG   660
CTGGGGCTGA CCGGGGTCCC CGCGGCGCTG CAGCTCCTTC TGCTGCCCTT CTTCCCCGAG   720
AGCCCCAGGT ACCTGCTGAT TCAGAAGAAA GACGAAGCGG CCGCCAAGAA AGCCCTACAG   780
ACGCTGCGCG GCTGGGACTC TGTGGACAGG GAGGTGGCCG AGATCCGGCA GGAGGATGAG   840
GCAGAGAAGG CCGCGGGCTT CATCTCCGTG CTGAAGCTGT TCCGGATGCG CTCGCTGCGC   900
TGGCAGCTGC TGTCCATCAT CGTCCTCATG GGCGGCCAGC AGCTGTCGGG CGTCAACGCT   960
ATCTACTACT ACGCGGACCA GATCTACCTG AGCGCCGGCG TGCCGGAGGA GCACGTGCAG  1020
TACGTGACGG CCGGCACCCG GGCCGTGAAC GTGGTCATGA CCTTCTGCGC CGTGTTCGTG  1080
GTGGAGCTCC TGGGTCGGAG GCTGCTGCTG CTGCTGGGCT TCTCCATCTG CCTCATAGCC  1140
TGCTGCGTGC TCACTGCAGC TCTGGCACTG CAGGACACAG TGTCCTGGAT GCCATACATC  1200
AGCATCGTCT GTGTCATCTC CTACGTCATA GGACATGCCC TCGGGCCCAG TCCCATACCC  1260
GCGCTGCTCA TCACTGAGAT CTTCCTGCAG TCCTCTCGGC CATCTGCCTT CATGGTGGGG  1320
GGCAGTGTGC ACTGGCTCTC CAACTTCACC GTGGGCTTGA TCTTCCCGTT CATCCAGGAG  1380
GGCCTCGGCC CGTACAGCTT CATTGTCTTC GCCGTGATCT GCCTCCTCAC CACCATCTAC  1440
ATCTTCTTGA TTGTCCCGGA GACCAAGGCC AAGACGTTCA TAGAGATCAA CCAGATTTTC  1500
ACCAAGACGA ATAAGGTGTC TGAAGTGTAC CCGGAAAAGG AGGAACTGAA AGAGCTTCCA  1560
CCTGTCACTT CGGAACAGTG ACTCTGGAGA GGAAGCCAGT GGAGCTGGTC TGCCAGGGGC  1620
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ACTCTGATGT GGAATGCAGT CCTCATCTCC AGCCTCCCCA CCCCAGTGGG AACTGTGCAA  1740
AGGGCTGCCT TGCTGTTCTT GAAGCTGGGC TGTCTCTCTC CATGTTGGCC TGTCACCAGA  1800
CCCGAGTCAA TTAAACAGCT GGTCCTCCAC TTTGCTGGTT CAGCCTTCGT GTGGCTCCTG  1860
GTAACGTGGC TCCACCTTGA TGGGTCAACC TTTGTGTGGC TCCTGGTAAC ATAACAACAA  1920
CAGTTACTAT AGTGGTGAGA TGGAAGGAAT CAAATTTTGC CAGAGAAACT AACTCGGTGG  1980
CCCCAACAGG TCTTCCGGGG CCATGGGCAT TTGTTTAGAG CCAAATTCAT CCTCTTACCA  2040
GATCCTTTTC CAGAAATACC TGTCTAGGAA GGTGTGATGT CAGAAACAAT GACATCCAGA  2100
AAGCTGAGGA ACAGGTTCCT GTGGAGACAC TGAGTCAGAA TTCTTCATCC AAATTATTTT  2160
GTTAGTGGAA AATGGAATTG CTTCTGTGTA GTCAATAAAA TGAACCTGAT CACTTTTC
```

Seq ID NO: 308 <u>Protein sequence</u>
Protein Accession #: NP_003030.1

```
 1         11         21         31         41         51
 |          |          |          |          |          |
MEQQDQSMKE GRLTLVLALA TLIAAFGSSF QYGYNVAAVN SPALLMQQFY NETYYGRTGE    60
FMEDPPLTLL WSVTVSMPPF GGFIGSLLVG PLVNKFGRKG ALLFNNIFSI VPAILMGCSR   120
VATSFELIII SRLLVGICAG VSSNVVPMYL GELAPKNLRG ALGVVPQLFI TVGILVAQIF   180
GLRNLLANVD GWPILLGLTG VPAALQLLLL PFFPESPRYL LIQKKDEAAA KKALQTLRGW   240
DSVDREVAEI RQEDEAEKAA GFISVLKLFR MRSLRWQLLS IIVLMGGQQL SGVNAIYYYA   300
DQIYLSAGVP EEHVQYVTAG TGAVNVVMTF CAVFVVELLG RRLLLLLGFS ICLIACCVLT   360
AALALQDTVS WMPYISIVCV ISYVIGHALG PSPIPALLIT EIFLQSSRPS AFMVGGSVHW   420
LSNFTVGLIF PFIQEGLGPY SFIVFAVICL LTTIYIFLIV PETKARTPIE INQIFTKMNK   480
VSEVYPEKEE LKELPPVTSE Q
```

Seq ID NO: 309 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001252.1
Coding sequence: 138..719

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 1         11         21         31         41         51
 |          |          |          |          |          |
GGCTGGTCCC CTGACAGGTT GAAGCAAGTA GACGCCCAGG AGCCCGGGA GGGGGCTGCA    60
GTTTCCTTCC TTCCTTCTCG GCAGCGCTCC GCGCCCCAT CGCCCTCCT GCGCTAGCGG   120
AGGTGATCGC CGCGGCGATG CCGGAGGAGG GTTCGGGCTG CTCGGTGCGG CGCAGGCCCT   180
ATGGGTGCGT CCTGCGGGCT GCTTTGGTCC CATTGGTCGC GGGCTTGGTG ATCTGCCTCG   240
TGGTGTGCAT CCAGCGCTTC GCACAGGCTC AGCAGCAGCT GCCGCTCGAG TCACTTGGGT   300
GGGACGTAGC TGAGCTGCAG CTGAATCACA CAGGACCTCA GCAGGACCCC AGGCTATACT   360
GGCAGGGGGG CCCAGCACTG GGCCGCTCCT TCCTGCATGG ACCAGAGCTG GACAAGGGGC   420
AGCTACGTAT CCATCGTGAT GGCATCTACA TGGTACACAT CCAGGTGACG CTGGCCCATCT   480
GCTCCTCCAC GACGGCCTCC AGGCACCACC CACCACCCT GGCCGTGGGA ATCTGCTCTC   540
CCGCCTCCCG TAGCATCAGC CTGCTGCGTC TCAGCTTCCA CCAAGGTTGT ACCATTGCTT   600
CCCAGCGCCT GACGCCCCTG GCCCGAGGGG ACACACTCTG CACCAACCTC ACTGGGACAC   660
TTTTGCCTTC CCGAAACACT GATGAGACCT TCTTTGGAGT GCAGTGGGTG CGCCCCTGAC   720
CACTGCTGCT GATTAGGGTT TTTTAAATTT TATTTATTT TATTTAAGTT CAAGAGAAAA   780
AGTGTACACA CAGGGGCCAC CCGGGGTTGG GGTGGGAGTG TGGTGGGGGG TAGTGGTGGC   840
AGGACAAGAG AAGGCATTGA GCTTTTTCTT TCATTTTCCT ATTAAAAAA
```

Seq ID NO: 310 <u>Protein sequence</u>
Protein Accession #: NP_001243.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MPEEGSGCSV RRRPYGCVLR AALVPLVAGL VICLVVCIQR FAQAQQQLPL ESLGWDVAEL    60
QLNHTGPQQD PRLYWQGGPA LGRSPLHGPE LDKGQLRIHR DGIYMVHIQV TLAICSSTTA   120
SRHHPTTLAV GICSPASRSI SLLRLSFHQG CTIASQRLTP LARGDTLCTN LTGTLLPSRN   180
TDETPFGVQW VRP
```

Seq ID NO: 311 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..3978

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1          11         21         31         41         51
|          |          |          |          |          |
ATGGTGGGTG AAGGACCCTA CCTTATCTCA GATCTGGACC AGCGGAGGCCG GCGGAGATCC    60
TTTGCAGAAA GATATGACCC CAGCCTGAAG ACCATGATCC CAGTGCGACC CTGTGCAAGG   120
TTAGCACCCA ACCCGGTGGA TGATGCCGGG CTACTCTCCT TCGCCACATT TTCCTGCCTC   180
ACGCCGGTGA TGGTGAAAGG CTACCGGCAA AGGCTGACCG TAGACACCCT GCCCCCATTG   240
TCGACATATG ACTCATCTGA CACCAATGCC AAAAGATTTC GAGTCCTTTG GGATGAAGAG   300
GTAGCAAGGG TGGGTCCTGA GAAGGCCTCT CTGAGCCACG TGGTGTGGAA ATTCCAGAGG   360
ACACGCGTGT TGATGGACAT CGTGGCCAAC ATCCTGTGCA TCATCATGCC AGCCATAGGG   420
CCGACAGTTC TCATTCACCA AATCCTCCAG CAGACTGAGA GGACCTCTGG GAAAGTCTGG   480
GTTGGCATTG GACTGTGCAT AGCCCTTTTT GCCACCGAGT TTACCAAAGT CTTCTTTTGG   540
GCCCTTGCCT GGGCCATCAA CTACCGCACG GCCATCCGGT TGAAGGTGGC GCTCTCCACC   600
TTGGTTTTTG AAAACCTAGT GTCCTTCAAG ACATTGACCC ACATCTCTGT TGGCGAGGTG   660
CTCAATATAC TGTCAAGTGA TAGCTATTCT TTGTTTGAAG CTGCCTTGTT TTGTCCTTTG   720
CCAGCCACCA TCCCGATCCT AATGGTCTTT TGTGCGGCGT ACGCCTTTTT CATTCTGGGG   780
CCCACAGCTC TCATCGGGAT ATCAGTGTAT GTCATATTCA TACCCGTCCA GATGTTTATG   840
GCCAAGCTCA ATTCAGCTTT CCGAAGGTCA GCAATTTTGG TGACAGACAA GCGAGTTCAG   900
ACAATGAATG AGTTTCTGAC CTGCATCAGG CTGATCAAAA TGTATGCCTG GGAGAAATCT   960
TTTACCAACA CTATCCAAGA TATAAGAAGG AGGGAAAGAA AATTACTGGA AAAAGCTGGA  1020
TTTGTCCAAA GTGGAAACTC TGCCCTGGCC CCCATCGTGT CCACCATAGC CATCGTGCTG  1080
ACATTATCCT GCCACATCCT CCTGAGACGC AAACTCACCG CACCCGTGCA ATTTAGTGTG  1140
ATTGCCATGT TAATGTAAT GAAGTTTTCC ATTGCAATCT TGCCCTTCTC CATCAAAGCA  1200
ATGGCTGAAG CGAATGTCTC TCTAAGGAGA ATGAAGAAAA TTCTCATAGA TAAAAGCCCC  1260
CCATCTTACA TCACCCAACC AGAAGACCCA GATACTGTCT TGCTTTTAGC AAATGCCACC  1320
TTGACATGGG AGCATGAAGC CAGCAGGAAA AGTACCCCAA AGAAATTGCA GAACCAGAAA  1380
AGGCATTTAT GCAAGAAACA GAGGTCAGAG GCATACAGTG AGAGGAGTCC ACCAGCCAAG  1440
GGAGCCACTG GCCCAGAGGA GCAAAGTGAC AGCCTCAAAT CGGTTCTGCA CAGCATAAGC  1500
TTTGTGGTGA GAAAGTTATG TCGTTATCCC GAAGCCCAGC TCCTGGCTTG GAGGTGGCCA  1560
GCAGTGTTTG TTGGGAGAAT CATCAGAGGA TACAGGCCTC ATGGATTTTC TGCTAAAGAC  1620
AAGGATGAAT CTAGAAGGCT TCTTACTTGG CCCCAAGAAG TGGATAGGAC TCAAAGGGCA  1680
GCCAAATACC TGGGGAAGAT CTTGGGAATA TGTGGGAATG TGGGAAGTGG AAAGAGCTCC  1740
CTCCTTGCAG CTCTCCTAGG ACAGATGCAG CTGCAGAAAG GGGTGGTGGC AGTCAATGGA  1800
ACTTTGGCCT ACGTTTCACA GCAGGCATGG ATCTTTCATG GAAATGTGAG AGAAAACATA  1860
CTCTTTGGAG AAAAGTATGA TCACCAAAGG TATCAGCACA CAGTCCGCGT CTGTGGCCTC  1920
CAGAAGGACC TGAGCAACCT CCCCTATGGA GACCTGACTG AGATTGGGGA GCGGGGCCTC  1980
AACCTCTCTG GGGGCAGAG GCAGAGGATT AGCCTGGCCC GCGCTGTCTA CTCCGACCGT  2040
CAGCTCTACC TGCTGGACGA CCCCCTGTCG GCCGTGGACG CCCACGTGGG GAAGCACGTC  2100
TTTGAGGAGT GCATTAAGAA GACGCTCAGG GGAAAGACAG TCGTCCTGGT GACCCACCAG  2160
CTACAGTTCT TAGAGTCTTG TGATGAAGTT ATTTTATTAG AAGATGGAGA GATTTGTGAA  2220
AAGGGAACCC ACAAGGAGTT AATGGAGGAA AGAGGGCGCT ATGCAAAACT GATTCACAAC  2280
CTGCGAGGAT TGCAGTTCAA GGATCCTGAA CACCTTTACA ATGCAGCAAT GGTGGAAGCC  2340
TTCAAGGAGA GCCCTGCTGA GAGAGAGGAA GATGCTGGTA TAATCGGGTA CCTCCTTTCT  2400
CTCTTCACTG TGTTCCTCTT CCTCCTGATG ATTGGCAGCG CTGCCTTCAG CAACTGGTGG  2460
CTGGGTCTCT GGTTGGACAA GGGCTCACGG ATGACCTGTG GGCCCCAGGG CAACAGGACC  2520
ATGTGTGAGG TCGGCGCGGT GCTGGCAGAC ATCGGTCAGC ATGTGTACCA GTGGGTGTAC  2580
ACTCAAGCA TGGTGTTCAT GCTGGTGTTT GGCGTCACCA AAGGCTTCGT CTTCACCAAG  2640
ACCACACTGA TGGCATCCTC CTCTCTGCAT GACACGGTGT TTGATAAGAT CTTAAAGAGC  2700
CCAATGAGTT TCTTTGACAC GACTCCCACT GGCAGGCTAA TGAACCGTTT TTCCAAGGAT  2760
ATGGACGAGC TGGATGTGAG GCTGCCGTTT CACGCAGAGA ACTTTCTGCA GCAGTTTTTT  2820
ATGGTGGTGT TTATTCTCGT GATCTTGGCT GCTGTGTTTC CTGCTGTCCT TTTAGTCGTG  2880
GCCAGCCTTG CTGTAGGCTT CTTCATTCTG TTACGCATTT TCCACAGAGG AGTCCAGGAG  2940
CTCAAGAAGG TGGAGAATGT CAGCCGGTCA CCCTGGTTCA CCCACATCAC CTCCTCCATG  3000
CAGGGCCTGG GCATCATTCA CGCCTATGGC AAGAAGGAGA GCTGCATCAC CTATACTTCA  3060
TCCAAAGGCC TGTCATTGTC ATACATCATC CAGCTGAGCG GACTGCTCCA AGTGTGTGTG  3120
CGAACGGGAA CAGAGACGCA AGCCAAATTC ACCTCCGTGG AGCTGCTCAG GGAATACATT  3180
TCGACCTGTG TTCCTGAATG CACTCATCCC CTCAAAGTGG GGACCTGTCC CAAGGACTGG  3240
CCCAGCTGTG GGGAGATCAC CTTCAGAGAC TATCAGATGA GATACAGAGA CAACACCCCC  3300
CTTGTTCTCG ACAGCCTGAA CTTGAACATA CAAAGTGGGC AGACAGTCGG GATTGTTGGA  3360
AGAACAGGTT CCGGAAAGTC ATCGTTAGGA ATGGCTTTGT TTCGTCCTGGT GGAGCCAGCC  3420
AGTGGCACAA TCTTTATTGA TGAGGTGGAT ATCTGCATTC TCAGCTTGGA AGACCTCAGA  3480
ACCAAGCTGA CTGTGATCCC ACAGGATCCT GTCCTGTTTG TAGGTACAGT AAGGTACAAC  3540
TTGGATCCCT TTGAGAGTCA CACCGATGAG ATGCTCTGGC AGGTTCTGGA GAGAACATTC  3600
ATGAGAGACA CAATAATGAA ACTCCCAGAA AAATTACAGG CAGAAGTGCA AGAAAATGGA  3660
GAAACTTCT CAGTAGGGGA ACGTCAGCTG CTTTGTGTGG CCCGAGCTCT TCTCCGTAAT  3720
TCAAAGATCA TTCTCCTTGA TGAAGCCACC GCCTCTATGG ACTCCAACGC TGACACCCTG  3780
GTTCAGAACA CCATCAAAGA TGCCTTCAAG GGCTGCACTG TGCTGACCAT CGCCCACCGC  3840
CTCAACACAG TTCTCAACTG CGATCACGTC CTGGTTATGG AAAATGGGAA GGTGATTGAG  3900
TTTGACAAGC TGAAGTCCT TGCAGAGAAG CCAGATTCTG CATTTGCGAT GTTACTAGCA  3960
GCAGAAGTCA GATTGTAG                                                3978
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Seq ID NO: 312 Protein sequence
Protein Accession #: Eos sequence

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     1         11         21         31         41         51
     |          |          |          |          |          |
     MVGEGPYLIS DLDQRGRRRS FAERYDPSLK TMIPVRPCAR LAPNPVDDAG LLSFATFSWL    60
     TPVMVKGYRQ RLTVDTLPPL STYDSSDTNA KRFRVLWDEE VARVGPEKAS LSHVVWKFQR   120
     TRVLMDIVAN ILCIIMAAIG PTVLIHQILQ QTERTSGKVW VGIGLCIALP ATEFTKVFFW   180
     ALAWAINYRT AIRLKVALST LVFENLVSFK TLTHISVGEV LNILSSDSYS LFEAALFCPL   240
     PATIPILMVF CAAYAFFILG PTALIGISVY VIFIPVQMFM AKLNSAFRRS AILVTDKRVQ   300
     TMNEFLTCIR LIKMYAWEKS FTNTIQDIRR RERKLLEKAG FVQSGNSALA PIVSTIAIVL   360
     TLSCHILLRR KLTAPVAFSV IAMFNVMKFS IAILPFSIKA MAEANVSLRR MKKILIDKSP   420
     PSYITQPEDP DTVLLLANAT LTWEHEASRK STPKKLQNQK RHLCKKQRSE AYSERSPPAK   480
     GATGPEEQSD SLKSVLHSIS FVVRKLCRYP EAQLLAWRWP AVFVGRIIRG YRPHGFSAKD   540
     KDESRRLLTW PQEVDRTQRA AKYLGKILGI CGNVGSGKSS LLAALLGQMQ LQKGVVAVNG   600
     TLAYVSQQAW IFHGNVRENI LFGEKYDHQR YQHTVRVCGL QKDLSNLPYG DLTEIGERGL   660
     NLSGGQRQRI SLARAVYSDR QLYLLDDPLS AVDAHVGKHV FEECIKKTLR GKTVVLVTHQ   720
     LQFLESCDEV ILLEDGEICE KGTHKELMEE RGRYAKLIHN LRGLQFKDPE HLYNAAMVEA   780
     FKESPAEREE DAGIIGYLLS LFTVFLFLLM IGSAAFSNWW LGLWLDKGSR MTCGPQGNRT   840
     MCEVGAVLAD IGQHVYQWVY TASMVFMLVF GVTKGFVFTK TTLMASSSLH DTVFDKILKS   900
     PMSFFDTTPT GRLMNRFSKD MDELDVRLPF HAENFLQQFF MVVFILVILA AVFPAVLLVV   960
     ASLAVGPFIL LRIFHRGVQE LKKVENVSRS PWFTHITSSM QGLGIIHAYG KKESCITYTS  1020
     SKGLSLSYII QLSGLLQVCV RTGTETQAKF TSVELLREYI STCVPECTHP LKVGTCPKDW  1080
     PSCGEITFRD YQMRYRDNTP LVLDSLNLNI QSGQTVGIVG RTGSGKSSLG MALFRLVEPA  1140
     SGTIFIDEVD ICILSLEDLR TKLTVIPQDP VLFVGTVRYN LDPFESHTDE MLWQVLERTF  1200
     MRDTIMKLPE KLQAEVTENG ENFSVGERQL LCVARALLRN SKIILLDEAT ASMDSKTDTL  1260
     VQNTIKDAFK GCTVLTIAHR LNTVLNCDHV LVMENGKVIE FDKPEVLAEK PDSAFAMLLA  1320
     AEVRL
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Seq ID NO: 313 <u>DNA sequence</u>
Nucleic Acid Accession #: Z31560
Coding sequence: 1-966

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     1         11         21         31    .    41         51
     |          |          |          |          |          |
     CACAGCGCCC GCATGTACAA CATGATGGAG ACGGAGCTGA AGCCGCCGGG CCCGCAGCAA    60
     ACTTCGGGGG GCGGCGGCGG CAACTCCACC GCGGCGGCGG CCGGCGGCAA CCAGAAAAAC   120
     AGCCCGGACC GCGTCAAGCG GCCCATGAAT GCCTTCATGG TGTGGTCCCG CGGGCAGCGG   180
     CGGCAAGATGG CCCAGGAGAA CCCCAAGATG CACAACTCGG AGATCAGCAA GCGCCTGGGC   240
     GCCGAGTGGA AACTTTTGTC GGAGACGGAG AAGCGGCCGT TCATCGACGA GGCTAAGCGG   300
     CTGCGAGCGC TGCACATGAA GGAGCACCCG GATTATAAAT ACCGGCCCCG GCGGAAAACC   360
     AAGACGCTCA TGAAGAAGGA TAAGTACACG CTGCCCGGCG GGCTGCTGGC CCCCGGCGGC   420
     AATAGCATGG CGAGCGGGGT CGGGGTGGGC GCCGGCCTGG CGCGGGGCGT GAACCAGCGC   480
     ATGGACAGTT ACGCGCACAT GAACGGCTGG AGCAACGGCA GCTACAGCAT GATGCAGGAC   540
     CAGCTGGGCT ACCCGCAGCA CCCGGGCCTC AATGCGCACG GCGCAGCGCA GATGCAGCCC   600
     ATGCACCGCT ACGACGTGAG CGCCCTGCAG TACAACTCCA TGACCAGCTC GCAGACCTAC   660
     ATGAACGGCT CGCCCACCTA CAGCATGTCC TACTCGCAGC AGGGCACCCC TGGCATGGCT   720
     CTTGGCTCCA TGGGTTCGGT GGTCAAGTCC GAGGCCAGCT CCAGCCCCCC TGTGGTTACC   780
     TCTTCCTCCC ACTCCAGGGC GCCCTGCCAG GCCGGGGACC TCCGGGACAT GATCAGCATG   840
     TATCTCCCCG GCGCCGAGGT GCCGGAACCC GCCGCCCCCA GCAGACTTCA CATGTCCCAG   900
     CACTACCAGA GCGGCCCGGT GCCCGGCACG GCCATTAACG GCACACTGCC CCTCTCACAC   960
     ATGTGAGGGC CGGACAGCGA ACTGGAGGGG GGAGAAATTT TCAAAGAAAA ACGAGGGAAA  1020
     TGGGAGGGGT GCAAAAGAGG AGAGTAAGAA ACAGCATGGA GAAAACCCGG TACGCTCAAA  1080
     AAAAA
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Seq ID NO: 314 <u>Protein sequence</u>
Protein Accession #: CAA83435

```
     1         11         21         31         41         51
     |          |          |          |          |          |
     HSARMYNMME TELKPPGPQQ TSGGGGGNST AAAAGGNQKN SPDRVKRPMN AFMVWSRGQR    60
     RKMAQENPKM HNSEISKRLG AEWKLLSETE KRPFIDEAKR LRALHMKEHP DYKYRPRRKT   120
     KTLMKKDKYT LPGGLLAPGG NSMASGVGVG AGLGAGVNQR MDSYAHMNGW SNGSYSMMQD   180
     QLGYPQHPGL NAHGAAQMQP MHRYDVSALQ YNSMTSSQTY MNGSPTYSMS YSQQGTPGMA   240
     LGSMGSVVKS EASSSPPVVT SSSHSRAPCQ AGDLRDMISM YLPGAEVPEP AAPSRLHMSQ   300
     HYQSGPVPGT AINGTLPLSH M
```

Seq ID NO: 315 <u>DNA sequence</u>
Nucleic Acid Accession #: U91618
Coding sequence: 29..541

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     1         11         21         31         41         51
     |          |          |          |          |          |
     CGGACTTGGC TTGTTAGAAG GCTGAAAGAT GATGGCAGGA ATGAAAATCC AGCTTGTATG    60
     CATGCTACTC CTGGCTTTCA GCTCCTGGAG TCTGTGCTCA GATTCAGAAG AGGAAATGAA   120
     AGCATTAGAA GCAGATTTCT TGACCAATAT GCATACATCA AAGATTAGTA AAGCACATGT   180
     TCCCTCTTGG AAGATGACTC TGCTAAATGT TTGCAGTCTT GTAAATAATT TGAACAGCCC   240
     AGCTGAGGAA ACAGGAGAAG TTCATGAAGA GGAGCTTGTT GCAAGAAGGA AACTTCCTAC   300
     TGCTTTAGAT GGCTTTAGCT TGGAAGCAAT GTTGACAATA TACCAGCTCC ACAAAATCTG   360
     TCACAGCAGG GCTTTTCAAC ACTGGGAGTT AATCCAGGAA GATATTCTTG ATACTGGAAA   420
     TGACAAAAAT GGAAAGGAAG AAGTCATAAA GAGAAAAATT CCTTATATTC TGAAACGGCA   480
     GCTGTATGAG AATAAACCCA GAAGACCCTA CATACTCAAA AGAGATTCTT ACTATTACTG   540
     AGAGAATAAA TCATTTATTT ACATGTGATT GTGATTCATC ATCCCTTAAT TAAATATCAA   600
     ATTATATTTG TGTGAAAATG TGACAAACAC ACTTATCTGT CTCTTCTACA ATTGTGGTTT   660
     ATTGAATGTG TTTTTCTGCA CTAATAGAAA TTAGACTAAG TGTTTTCAAA TAAATCTAAA   720
     TCTTCAAAAA AAAAAAAAAA AAATGGGGCC GCAATT
```

Seq ID NO: 316 <u>Protein sequence</u>
Protein Accession #: AAB50564

```
1          11         21         31         41         51
|          |          |          |          |          |
MMAGMKIQLV CMLLLAFSSW SLCSDSEEEM KALEADPLTN MHTSKISKAH VPSWKMTLLN   60
VCSLVNNLNS PAEETGEVHE EELVARRKLP TALDGFSLEA MLTIYQLHKI CHSRAFQHWE  120
LIQEDILDTG NDKNGKEEVI KRKIPYILKR QLYENKPRRP YILKRDSYYY
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Seq ID NO: 317 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_006536.2
Coding sequence: 109..2940

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1          11         21         31         41         51
|          |          |          |          |          |
ACCTAAAACC TTGCAAGTTC AGGAAGAAAC CATCTGCATC CATATTGAAA ACCTGACACA    60
ATGTATGCAG CAGGCTCAGT GTGAGTGAAC TGGAGGCTTC TCTACAACAT GACCCAAAGG   120
AGCATTGCAG GTCCTATTTG CAACCTGAAG TTTGTGACTC TCCTGGTTGC CTTAAGTTCA   180
GAACTCCCAT TCCTGGGAGC TGGAGTACAG CTTCAAGACA ATGGGTATAA TGGATTGCTC   240
ATTGCAATTA ATCCTCAGGT ACCTGAGAAT CAGAACCTCA TCTCAAACAT TAAGGAAATG   300
ATAACTGAAG CTTCATTTTA CCTATTTAAT GCTACCAAGA GAAGAGTATT TTTCAGAAAT   360
ATAAAGATTT TAATACCTGC CACATGGAAA GCTAATAATA ACAGCAAAAT AAAACAAGAA   420
TCATATGAAA AGGCAAATGT CATAGTGACT GACTGGTATG GGCACATGG AGATGATCCA     480
TACACCCTAC AATACAGAGG GTGTGGAAAA GAGGGAAAAT ACATTCATTT CACACCTAAT   540
TTCCTACTGA ATGATAACTT AACAGCTGGC TACGGATCAC GAGGCCGAGT GTTTGTCCAT   600
GAATGGGCCC ACCTCCGTTG GGGTGTGTTC GATGAGTATA ACAATGACAA ACCTTTCTAC   660
ATAAATGGGC AAAATCAAAT TAAAGTGACA AGGTGTTCAT CTGACATCAC AGGCATTTTT   720
GTGTGTGAAA AAGGTCCTTG CCCCCAAGAA AACTGTATTA TTAGTAAGCT TTTTAAAGAA   780
GGATGCACCT TTATCTACAA TAGCACCCAA AATGCAACTG CATCAATAAT GTTCATGCAA   840
AGTTTATCTT CTGTGGTTGA ATTTTGTAAT GCAAGTACCC ACAACCAAGA AGCACCAAAC   900
CTACAGAACC AGATGTGCAG CCTCAGAAGT GCATGGGATG TAATCACAGA CTCTGCTGAC   960
TTTCACCACA GCTTTCCCAT GAATGGGACT GAGCTTCCAC CTCCTCCCAC ATTCTCGCTT  1020
GTACAGGCTG GTGACAAAGT GGTCTGTTTA GTGCTGGATG TGTCCAGCAA GATGGCAGAG  1080
GCTGACAGAC TCCTTCAACT ACAACAAGCC GCAGAATTTT ATTTGATGCA GATTGTTGAA  1140
ATTCATACCT TCGTGGGCAT TGCCAGTTTC GACAGCAAAG GAGAGATCAG AGCCCAGCTA  1200
CACCAAATTA ACAGCAATGA TGATCGAAAG TTGCTGGTTT CATATCTGCC CACCACTGTA  1260
TCAGCTAAAA CAGACATCAG CATTTGTTCA GGGCTTAAGA AAGGATTTGA GGTGGTTGAA  1320
AAACTGAATG GAAAAGCTTA TGGCTCTGTG ATGATATTAG TGACCAGCGG AGATGATAAG  1380
CTTCTTGGCA ATTGCTTACC CACTGTGCTC AGCAGTGGTT CAACAATTCA CTCCATTGCC  1440
CTGGGTTCAT CTGCAGCCCC AAATCTGGAG GAATTATCAC GTCTTACAGG AGGTTTAAAG  1500
TTCTTTGTTC CAGATATATC AAACTCCAAT AGCATGATTG ATGCTTTCAG TAGAATTTCC  1560
TCTGGAACTG GAGACATTTT CCAGCAACAT ATTCAGCTTG AAAGTACAGG TGAAAATGTC  1620
AAACCTGTACC ATCAATTGAA AAACACAGTG ACTGTGGATA ATACTGTGGG CAACGACACT  1680
ATGTTTCTAG TTACGTGGCA GGCCAGTGGT CCTCCTGAGA TTATATTATT TGATCCTGAT  1740
GGACGAAAAT ACTACACAAA TAATTTTATC ACCAATCTAA CTTTTCGGAC AGCTAGTCTT  1800
TGGATTCCAG GAACAGCTAA GCCTGGGCAC TGGACTTACA CCCATCAT     1860
TCTCTGCAAG CCCTGAAAGT GACAGTGACC TCTCGCGCCT CCAACTCAGC TGTGCCCCCA  1920
GCCACTGTGG AAGCCTTTGT GGAAAGAGAC AGCCTCCATT TTCCTCATCC TGTGATGATT  1980
TATGCCAATG TGAAACAGGG ATTTTATCCC ATTCTTAATG CCACTGTCAC TGCCACAGTT  2040
GAGCCAGAGA CTGGAGATCC TGTTACGCTG AGACTCCTTG ATGATGGAGC AGGTGCTGAT  2100
GTTATAAAAA ATGATGGAAT TTACTCGAGG TATTTTTTCT CCTTTGCTGC AAATGGTAGA  2160
TATAGCTTGA AAGTGCATGT CAATCACTCT CCCAGCATAA GCACCCCAGC CCACTCTATT  2220
CCAGGGAGTC ATGCTATGTA TGTACCAGGT TACACAGCAA ACGGTAATAT TCAGATGAAT  2280
GCTCCAAGGA AATCAGTAGG CAGAAATGAG GAGGAGCGAA AGTGGGGCTT TAGCCGAGTC  2340
AGCTCAGGAG GCTCCTTTTC AGTGCTGGGA GTTCCAGCTG GCCCCCACCC TGATGTGTTT  2400
CCACCATGCA AAATTATTGA CCTGGAAGCT GTAAAAGTAG AAGAGGAATT GACCCTATCT  2460
TGGACAGCAC CTGGAGAAGA CTTTGATCAG GGCCAGGCTA CAAGCTATGA AATAAGAATG  2520
AGTAAAAGTC TACAGAATAT CCAAGATGAC TTTAACAATG CTATTTTAGT AAATACATCA  2580
AAGCGAAATC CTCAGCAAGC TGGCCATCAG GAGATATTTA CGTTCTCACC CCAGATTTCC  2640
ACGAATGGAC CTGAACATCA GCCAAATGGA GAAACACATG AAAGCCACAG AATTTATGTT  2700
GCAATACGAG CAATGGATAG GAACTCCTTA CAGTCTGCTG TATCTAACAT TGCCCAGGCG  2760
CCTCTGTTTA TTCCCCCCAA TTCTGATCCT GTACCTGCCA GAGATTATCT TATATTGAAA  2820
GGAGTTTAA CAGCAATGGG TTTGATAGGA ATCATTGCC TTATTATAGT TGTGACACAT    2880
CATACTTTAA GCAGGAAAAA GAGAGCGAGC AAGAAAGAGA ATGGAACAAA ATTATTATAA  2940
ATAAATATCC AAAGTGTCTT CCTTCTTAGA TATAAGACCC ATGGCCTTCG ACTACAAAAA  3000
CATACTAACA AAGTCAAATT AACATCAAAA CTGTATTAAA ATGCATTGAG TTTTTGTACA  3060
ATACAGATAA GATTTTTACA TGGTAGATCA ACAATTCTTT TTGGGGGTAG ATTAGAAAAC  3120
CCTTACACTT TGGCTATGAA CAAATAATAA AAATTATTCT TTAAAGTAAT GTCTTTAAAG  3180
GCAAAGGGAA GGGTAAAGTC GGACCAGTGT CAAGGAAAGT TTGTTTTATT GAGGTGGAAA  3240
AATAGCCCCA AGCAGAGAAA AGGAGGGTAG GTCTGCATTA TAACTGTCTG TGTGAAGCAA  3300
TCATTTAGTT ACTTTGATTA ATTTTTCTTT TCTCCTTATC TGTGCAGTAC AGGTTGCTTG  3360
TTTACATGAA GATCATGCTA TATTTTATAT ATGTAGCCCC TAATGCAAAG CTCTTTACCT  3420
CTTGCTATTT TGTTATATAT ATTTCAGATG ACATCTCCCT GCTAATGCTC AGAGATCTTT  3480
TTTCACTGTA AGAGGTAACC TTTAACAATA TGGGTATTAC CTTTGTCTCT TCATACCGGT  3540
TTTATGACAA AGGTCTATTG AATTTATTTG TNTGTAAGTT TCTACTCCCA TCAAAGCAGC  3600
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TACCTAGGAA A
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Seq ID NO: 318 <u>Protein sequence</u>
Protein Accession #: NP_006527.1

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MTQRSIAGPI CNLKFVTLLV ALSSELPFLG AGVQLQDNGY NGLLIAINPQ VPENQNLISN   60
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          GDDPYTLQYR GCGKEGKYIH FTPNFLLNDN LTAGYGSRGR VFVHEWAHLR WGVFDEYNND   180
          KPPYINGQNQ IKVTRCSSDI TGIFVCEKGP CPQENCIISK LFKEGCTFIY NSTQNATASI   240
          MFMQSLSSVV EFCNASTHNQ EAPNLQNQMC SLRSAWDVIT DSADFHHSFP MNGTELPPPP   300
          TFSLVQAGDK VVCLVLDVSS KMAEADRLLQ LQQAAEFYLM QIVEIHTFVG IASFDSKGEI   360
          RAQLHQINSN DDRKLLVSYL PTTVSAKTDI SICSGLKKGP EVVEKLNGKA YGSVMILVTS   420
          GDDKLLGNCL PTVLSSGSTI HSIALGSSAA PNLEELSRLT GGLKFFVPDI SNSNSMIDAF   480
          SRISSGTGDI FQQHIQLEST GENVKPHHQL KNTVTVDNTV GNDTMFLVTW QASGPPEIIL   540
          FDPDGRKYYT NNFITNLTFR TASLWIPGTA KPGHWTYTLN NTHHSLQALK VTVTSRASNS   600
          AVPPATVEAF VERDSLHFPH PVMIYANVKQ GFYPILNATV TATVEPETGD PVTLRLLDDG   660
          AGADVIKNDG IYSRYFFSFA ANGRYSLKVH VNHSPSISTP AHSIPGSHAM YVPGYTANGN   720
          IQMNAPRKSV GRNEEERKWG FSRVSSGGSF SVLGVPAGPH PDVFPPCKII DLEAVKVEBE   780
          LTLSWTAPGE DFDQGQATSY EIRMSKSLQN IQDDFNNAIL VNTSKRNPQQ AGIREIPTFS   840
          PQISTNGPEH QPNGETHESH RIYVAIRAMD RNSLQSAVSN IAQAPLFIPP NSDPVPARDY   900
          LILKGVLTAM GLIGIICLII VVTHHTLSRK KRADKKENGT KLL
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Seq ID NO: 319 DNA sequence
Nucleic Acid Accession #: NM_000228.1
Coding sequence: 82..3600

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          GGATCACCCC ATTGGCTGAA GATGAGACCA TTCTTCCTCT TGTGTTTTGC CCTGCCTGGC  120
          CTCCTGCATG CCCAACAAGC CTGCTCCCGT GGGGCCTGCT ATCCACCTGT TGGGGACCTG  180
          CTTGTTGGGA GGACCCGGTT TCTCCGAGCT TCATCTACCT GTGGACTGAC CAAGCCTGAG  240
          ACCTACTGCA CCCAGTATGG CGAGTGGCAG ATGAAATGCT GCAAGTGTGA CTCCAGGCAG  300
          CCTCACAACT ACTACAGTCA CCGAGTAGAG AATGTGGCTT CATCCTCCGG CCCCATGCGC  360
          TGGTGGCAGT CCCAGAATGA TGTGAACCCT GTCTCTCTGC AGCTGGACCT GGACAGGAGA  420
          TTCCAGCTTC AAGAAGTCAT GATGGAGTTC CAGGGGCCCA TGCCCGCCGG CATGCTGATT  480
          GAGCGCTCCT CAGACTTCGG TAAGACCTGG CGAGTGTACC AGTACCTGGC TGCCGACTGC  540
          ACCTCCACCT TCCCTCGGGT CCGCCAGGGT CGGCCTCAGA GCTGGCAGGA TGTTCGGTGC  600
          CAGTCCCTGC CTCAGAGGCC TAATGCACGC CTAAATGGGG GGAAGGTCCA ACTTAACCTT  660
          ATGGATTTAG TGTCTGGGAT TCCAGCAACT CAAAGTCAAA AAATTCAAGA GGTGGGGGAG  720
          ATCACAAACT TGAGAGTCAA TTTCACCAGG CTGGCCCCTG TGCCCCAAAG GGGCTACCAC  780
          CCTCCCAGCG CCTACTATGC TGTGTCCCAG CTCCGTCTGC AGGGGAGCTG CTTCTGTCAC  840
          GGCCATGCTG ATCGCTGCGC ACCCAAGCCT GGGGCCTCTG CAGGCCCCTC CACCGCTGTG  900
          CAGGTCCACG ATGTCTGTGT CTGCCAGCAC AACACTGCCG GCCCAAATTG TGAGCGCTGT  960
          GCACCCTTCT ACAACAACGC GCCCTGGAGA CCGGCGGAGG CCAGGACGC CCATGAATGC 1020
          CAAAGGTGCG ACTGCAATGG GCACTCAGAG ACATGTCACT TTGACCCCGC TGTGTTTGCC 1080
          GCCAGCCAGG GGGCATATGG AGGTGTGTGT GACAATTGCC GGGACCACAC CGAAGGCAAG 1140
          AACTGTGAGC GGTGTCAGCT GCACTATTTC CGGAACCGGC GCCCGGGAGC TTCCATTCAG 1200
          GAGACCTGCA TCTCCTGCGA GTGTGATCCG GATGGGGCAG TGCCAGGGGC TCCCTGTGAC 1260
          CCAGTGACCG GGCAGTGTGT GTGCAAGGAG CATGTGCAGG AGAGCGCTG TGACCTATGC 1320
          AAGCCGGGCT TCACTGGACT CACCTACGCC AACCCGCAGG GCTGCCACCG CTGTGACTGC 1380
          AACATCCTGG GGTCCCGGAG GGACATGCCG TGTGACGAGG AGAGTGGGCG CTGCCTTTGT 1440
          CTGCCCAACG TGGTGGGTCC CAAATGTGAC CAGTGTGCTC CCTACCACTG GAAGCTGGCC 1500
          AGTGGCCAGG GCTGTGAACC GTGTGCCTGC GACCCGCACA ACTCCCCTCA GCCCACAGTG 1560
          CAACCAGTTC ACAGGGCAGT GCCCTGTCGG GAAGGCTTTG GTGGCCTGAT GTGCAGCGCT 1620
          GCAGCCATCC GCCAGTGTCC AGACCGGACC TATGGAGACG TGGCCACAGG ATGCCGAGCC 1680
          TGTGACTGTG ATTTCCGGGG AACAGAGGGC CCGGGCTGCG ACAAGGCATC AGGCCGCTGC 1740
          CTCTGCCGCC CTGGCTTGAC CGGGCCCCGC TGTGACCAGT GCCAGCGAGG CTACTGCAAT 1800
          CGCTACCCGG TGTGCGTGGC CTGCCACCCT TGCTTCCAGA CCTATGATGC GGACCTCCGG 1860
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          GGGCTGGAGG ACCGTGGCCT GGCCTCCCGG ATCCTAGATG CAAAGAGTAA GATTGAGCAG 1980
          ATCCGAGCAG TTCTCAGCAG CCCCGCAGTC ACAGAGCAGG AGGTGGCTCA GGTGGCCAGT 2040
          GCCATCCTCT CCCTCAGGCG AACTCTCCAG GGCCTGCAGC TGGATCTGCC CCTGGAGGAG 2100
          GAGAGCTTGT CCCTTCCCAG AGACCTGGAG AGTCTTGACA GAAGCTTCAA TGGTCTCCTT 2160
          ACTATGTATC AGAGGAAGAG GGAGCAGTTT GAAAAAAATAA GCAGTGCTGA TCCTTCAGGA 2220
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          GACGACTCGC GCCTTTTGGA CCAGCTCAGG GACAGCCGGA GAGAGGCAGA GAGGCTGGTG 2340
          CGGCAGGCGG GAGGAGGAGG AGGCACCGGC AGCCCCAAGC TTGTGGCCCT GAGGCTGGAG 2400
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          CAGGTCCGGG ACTTCCTAAC AGACCCCGAC ACTGATGCAG CCACTATCCA GGAGGTCAGC 2820
          GAGGCCGTGC TGGCCCCTGTG GCTGCCCACA GACTCAGCTA CTGTTCTGCA GAAGATGAAT 2880
          GAGATCCAGG CCATTGCAGC CAGGCTTGCCC AACGTGGACT TGGTGCTGTC CCAGACCAAG 2940
          CAGGACATTG CGCGTGCCCG CCGGTTGCAG GCTGAGGCTG AGGAAGCCAG GAGCCGAGCC 3000
          CATGCAGTGG AGGGCCAGGT GGAAGATGTG GTTGGGAACC TGCGGCAGGG GACAGTGGCA 3060
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          AGGGTTGCTG AGGTTCAGCA GGTACTGCGG CCAGCAGAAA AGCTGGTGAC AAGCATGACC 3180
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          GATTGGGTTG GAATGCTTTC CATCTCCAGG AGACTTTCAT GCAGCCTAAA GTACAGCCTG 3720
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GACCACCCCT GGTGTGTAGC TAGTAAGATT ACCCTGAGCT GCAGCTGAGC CTGAGCCAAT   3780
GGGACAGTTA CACTTGACAG ACAAAGATGG TGGAGATTGG CATGCCATTG AAACTAAGAG   3840
CTCTCAAGTC AAGGAAGCTG GGCTGGGCAG TATCCCCGC CTTTAGTTCT CCACTGGGGA    3900
GGAATCCTGG ACCAAGCACA AAAACTTAAC AAAAGTGATG TAAAAATGAA AAGCCAAATA   3960
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5   `AAAATCTTTG G`

Seq ID NO: 320 Protein sequence
Protein Accession #: NP_000219.1

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EWQMKCCKCD SRQPHNYYSH RVENVASSSG PMRHWQSQND VNPVSLQLDL DRRFQLQBVM   120
MEFQGPMPAG MLIERSSDFG KTWRVYQYLA ADCTSTFPRV RQGRPQSWQD VRCQSLPQRP   180
NARLNGGKVQ LNLMDLVSGI PATQSQKIQE VGEITNLRVN FTRLAPVPQR GYHPPSAYYA   240
VSQLRLQGSC FCHGHADRCA PKPGASAGPS TAVQVHDVCV CQHNTAGPNC ERCAPFYNNR   300
PWRPAEGQDA HECQRCDCNG HSETCHFDPA VFAASQGAYG GVCDNCRDHT EGKNCERCQL   360
HYFRNRRPGA SIQETCISCE CDPDGAVPGA PCDPVTGQCV CKEHVQGERC DLCKPGFTGL   420
TYANPQGCHR CDCNILGSRR DMPCDEESGR CLCLPNVVGP KCDQCAPYHW KLASGQGCEP   480
CACDPHNSPQ PTVQPVHRAV PCREGFGGLM CSAAAIRQCP DRTYGDVATG CRACDCDFRG   540
TEGPGCDKAS GRCLCRPGLT GPRCDQCQRG YCNRYPVCVA CHPCFQTYDA DLREQALRFG   600
RLRNATASLW SGPGLEDRGL ASRILDAKSK IEQIRAVLSS PAVTEQEVAQ VASAILSLRR   660
TLQGLQLDLP LEEETLSLPR DLESLDRSFN GLLTMYQRKR EQFEKISSAD PSGAFRMLST   720
AYEQSAQAAQ QVSDSSRLLD QLRDSRREAB RLVRQAGGGG GTGSPKLVAL RLEMSSLPDL   780
TPTFNKLCGN SRQMACTPIS CPGELCPQDN GTACGSRCRG VLPRAGGAFL MAGQVAEQLR   840
GFNAQLQRTR QMIRAAEESA SQIQSSAQRL ETQVSASRSQ MEEDVRRTRL LIQQVRDFLT   900
DPPDTDAATIQ EVSEAVLALW LPTDSATVLQ KMNEIQAIAA RLPNVDLVLS QTKQDIARAR   960
RLQAEAEBAR SRAHAVEGQV EDVVGNLRQG TVALQEAQDT MQGTSRSLRL IQDRVAEVQQ  1020
VLRPAEKLVT SMTKQLGDFW TRMEELRHQA RQQGAEAVQA QQLAEGASEQ ALSAQEGFER  1080
IKQKYAELKD RLGQSSMLGE QGARIQSVKT EAEELFGETM EMMDRMKDME LELLRGSQAI  1140
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Seq ID NO: 321 DNA sequence
Nucleic Acid Accession #: NM_001944.1
Coding sequence: 84..3083

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ATGATGAAGA AGAGATGACT ATGCAACAAG CTAAAAGAAG GCAAAAACGT GAATGGGTGA   240
AATTTGCCAA ACCCTGCAGA GAAGGAGAAG ATAACTCAAA AAGAAACCCA ATTGCCAAGA   300
TTACTTCAGA TTACCAAGCA ACCCAGAAAA TCACCTACCG AATCTCTGGA GTGGGAATCG   360
ATCAGCCGCC TTTTTGGAATC TTTGTTGTTG ACAAAAACAC TGGAGATATT AACATAACAG   420
CTATAGTCGA CCGGGAGGAA ACTCCAAGCT TCCTGATCAC ATGTCGGGCT CTAAATGCCC   480
AAGGACTAGA TGTAGAGAAA CCACTTTATC TAACGGTTAA AATTTTGGAT ATTAATGATA   540
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ACTCACTGGT GATGATACTA AATGCCACAG ATGCAGATGA ACCAAACCAC TTGAATTCTA   660
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CAGCACGTAT TGAAGAAAAT ATTTTAAGTT CTGAATTACT TCGATTTCAA GTAACAGATT   960
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GATACCTAAT GATTGATTCA AAAACTGCTG AAATCAAATT TGTCAAAAAT ATGAACCGAG  1440
ATTCTACTTT CATAGTTAAC AAAAACAATCA CAGCTGAGGT TCTGGCCATA GATGAATACA  1500
CGGGTAAAAC TTCTACAGGC ACGGTATATG TTAGAGTACC CGATTTCAAT GACAATTGTC  1560
CAACAGCTGT CCTCGAAAAA GATGCAGTTT GCAGTTCTTC ACCTTCCGTG GTTGTCTCCG  1620
CTAGAACACT GAATAATAGA TACACTGGCC CCTATACATT TGCACTGGAA GATCAACCTG  1680
TAAAGTTGCC TGCCGTATGG AGTATCACAA CCCTCAATGC TACCTCGGCC CTCCTCAGAG  1740
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GCATCTGTGG AACTTCTTAC CCAACCACAA GCCCTGGGAC CAGGTATGGC AGGCCGCACT  1920
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GAGCCGATTT CATGGGAAGT TCTGAAGTTT GTACAAATAC GTATGCCAGA GGCACAGCGG  2220
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TTAAAAAACT TGCAGAGATA AGCCTTGGTG TTGATGGTGA AGGCAAAGAA GTTCAGCCAC  2700
CCTCTAAAGA CAGCGGTTAT GGGATTGAAT CCTGTGGCCA TCCCATAGAA GTCCAGCAGA  2760
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     TAACGGAGAC TTACTCGGCT TCTGGTTCCC TCGTGCAACC TTCCACTGCA GGCTTTGATC  2940
  5  CACTTCTCAC ACAAAATGTG ATAGTGACAG AAAGGGTGAT CTGTCCCATT TCCAGTGTTC  3000
     CTGGCAACCT AGCTGGCCCA ACGCAGCTAC GAGGGTCACA TACTATGCTC TGTACAGAGG  3060
     ATCCTTGCTC CCGTCTAATA TGACCAGAAT GAGCTGGAAT ACCACACTGA CCAAATCTGG  3120
     ATCTTTGGAC TAAAGTATTC AAAATAGCAT AGCAAAGCTC ACTGTATTGG GCTAATAATT  3180
     TGGCACTTAT TAGCTTCTCT CATAAACTGA TCACGATTAT AAATTAAATG TTTGGGTTCA  3240
 10  TACCCCAAAA GCAATATGTT GTCACTCCTA ATTCTCAAGT ACTATTCAAA TTGTAGTAAA  3300
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     Seq ID NO: 322 Protein sequence
     Protein Accession #: NP_001935.1
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      GEDNSKRNPI AKITSDYQAT QKITYRISGV GIDQPPFGIF VVDKNTGDIN ITAIVDREET  120
      PSFLITCRAL NAQGLDVEKP LILTVKILDI NDNPPVFSQQ IFMGEIEENS ASNSLVMILN  180
 20   ATDADEPNHL NSKIAFKIVS QEPAGTPMFL LSRNTGEVRT LTNSLDREQA SSYRLVVSGA  240
      DKDGEGLSTQ CECNIKVKDV NDNFPMFRDS QYSARIEENI LSSELLRFQV TDLDEEYTDN  300
      WLAVYFFTSG NEGNWFEIQT DPRTNEGILK VVKALDYEQL QSVKLSIAVK NKAEFHQSVI  360
      SRYRVQSTPV TIQVINVREG IAFRPASKTF TVQKGISSKK LVDYILGTYQ AIDEDTNKAA  420
      SNVKYVMGRN DGGYLMIDSK TAEIKFVKNM NRDSTFIVNK TITAEVLAID EYTGKTSTGT  480
 25   VYVRVPDFND NCPTAVLEKD AVCSSSPSVV VSARTLNNRY TGPYTFALED QPVKLPAVWS  540
      ITTLNATSAL LRAQEQIPPG VYHISLVLTD SQNNRCEMPR SLTLEVCQCD NRGICGTSYP  600
      TTSPGTRYGR PHSGRLGPAA IGLLLLGLLL LLLAPLLLLT CDCGAGSTGG VTGGFIPVPD  660
      GSEGTIHQWG IEGAHPEDKE ITNICVPPVT ANGADFMBSS EVCTNTYARG TAVEGTSGME  720
 30   MTTKLGAATE SGGAAGFATG TVSGAASGFG AATGVGICSS GQSGTMRTRH STGGTNKDYA  780
      DGAISMNFLD SYFSQKAFAC AEEDDGQEAN DCLLIYDNEG ADATGSPVGS VGCCSFIADD  840
      LDDSFLDSLG PKFKKLAEIS LGVDGEGKEV QPPSKDSGYG IESCGHPIEV QQTGFVKCQT  900
      LSGSQGASAL SASGSVQPAV SIPDPLQHGN YLVTETYSAS GSLVQPSTAG FDPLLTQNVI  960
      VTERVICPIS SVPGNLAGPT QLRGSHTMLC TEDPCSRLI
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 35   Seq ID NO: 323 DNA sequence
      Nucleic Acid Accession #: XM_058069.2
      Coding sequence: 1..1413
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      TATGGCCTTG AGATAAACAA ACTTCCAGTG ACAAAAATGA AATATAGTGG AAACTTAATG  180
      AAGGAAAAAA TCCAAGAAAT GCAGCACTTC TTGGGTCTGA AGTGACCGG GCAACTGGAC  240
 45   ACATCTACCC TGGAGATGAT GCACGCACCT CGATGTGGAG TCCCCGATGT CCATCATTTC  300
      AGGGAAATGC CAGGGGGGCC CGTATGGAGG AAACATTATA TCACCTACAG AATCAATAAT  360
      TACACACCTG ACATGAACCG TGAGGATGTT GACTACGCAA TCCGGAAAGC TTTTCAAGTA  420
      TGGAGTAATG TTACCCCCTT GAAATTCAGC AAGATTAACA CAGGCATGGC TGACATTTTG  480
      GTGGTTTTTG CCCGTGGAGC TCATGGAGAC TTCCATGCTT TTGATGGCAA AGGTGGAATC  540
 50   CTAGCCCATG CTTTTGGACC TGGATCTGGC ATTGGAGGGG ATGCACATTT CGATGAGGAC  600
      GAATTCTGGA CTACACATTC AGGAGGCACA AACTTGTTCC TCACTGCTGT TCACGAGATT  660
      GGCCATTCCT TAGGTCTTGG CCATTCTAGT GATCAAAGG CCGTAATGTT CCCCACCTAC  720
      AAATATGTTG ACATCAACAC ATTTCGCCTC TCTGCTGATG ACATACGTGG CATTCAGTCC  780
      CTGTATGGAG ACCCAAAAGA GAACCAACGC TTGCCAAATC CTGACAATTC AGAACCAGCT  840
 55   CTCTGTGACC CCAATTTGAG TTTTGATGCT GTCACTACCG TGGGAAATAA GATCTTTTTC  900
      TTCAAAGACA GGTTCTTCTG GCTGAAGGTT TCTGAGAGAC CAAAGACCAG TGTTAATTTA  960
      ATTTCTTCCT TATGGCCAAC CTTGCCATCT GGCATTGAAG CTGCTTATGA AATTGAAGCC  1020
      AGAAACAAG TTTTTCTTTT TAAAGATGAC AAATACTGGT TAATTAGCAA TTTAAGACCA  1080
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 60   GATGCAGCTG TTTTTAACCC ACGTTTTTAT AGGACCTACT TCTTTGTAGA TAACCAGTAT  1200
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 65   Seq ID NO: 324 Protein sequence
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      KEKIQEMQHF LGLKVTGQLD TSTLEMMHAP RCGVPDVHHP REMPGGPVWR KHYITYRINN  120
      YTPDMNREDV DYAIRRAFQV WSNVTPLKFS KINTGMADIL VVFARGAHGD FHAFDGKGGI  180
      LAHAFGPGSG IGGDAHFDED EFWTTHSGGT NLFLTAVHBI GHSLGLGHSS DPKAVMFPTY  240
 75   KYVDINTFRL SADDIRGIQS LYGDPKENQR LPNPDNSEPA LCDPNLSFDA VTTVGNKIPF  300
      FKDRFFWLKV SERPKTSVNL ISSLWPTLPS GIEAAYEIEA RNQVFLFKDD KYWLISNLRP  360
      EPNYPKSIHS FGFPNFVKKI DAAVFNPRFY RTYFFVDNQY WRYDERRQMM DPGYPKLITK  420
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 80   Seq ID NO: 325 DNA sequence
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Seq ID NO: 326 Protein sequence
Protein Accession #: NP_077741.1

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       CAAGAAAATA TATTTTTAAA GCTTTCATTT TTCCCCCAGT GAATGATTCA GAATTTTTTA  5640
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 75    GGGGTTTGTT TTGCAATGTT TTAAACAGAG TTTTAGTATT GCTATTAAAA GAAGTTACTT  5760
       TGCTTTTAAA GAAACTTGGC TGCTTAAAAT AAGCAAAAAT TGGATGCATA AAGTAATATT  5820
       TACAGATGTG GGGAGATGTA ATAAAACAAT ATTAACTTGG TTTCTTGTTT TTGCTGTATT  5880
       TAGAGATTAA ATAATTCTAA GATGATCACT TTGCAAAATT ATGCTTATGG CTGGCATGGA  5940
       AATAGAAATA CTCAATTATG TCTTTGTTGT ATTAATGGGG AATATTTTGG ACAATGTTTC  6000
 80    ATTATCAAAT TGTCGACATC ATTAATATAT ATTGTAATGT TGGGAAGAGA TCACTATTTT  6060
       GAAGCACAGC TTTACAGATG AGTATCTATG ATACATATGT ATAATAAATT TTGATCGGGT  6120
       ATTAAAAGTA TTAGAAGGTG GTTATAATTG CAGAGTATTC CATGAATAGT ACACTGACAC  6180
       AGGGGTTTTA CTTTGAGGAC CAGTGTAGTC AAGGGAAAAC ATGAGTTAAA AAGAAAAGCA  6240
       GGCAATATTG CAGTCTTGAT TCTGCCACTT ACAGGATAGA TAATGCCTGA ACTTTAATGA  6300
       CAAGATGATC CAACCATAAA GGTGCTCTGT GCTTCACAGT GAATCTTTTC CCCATGCAGG  6360
```

5

10

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AGTGTGCTCC CCTACAAACG TTAAGACTGA TCATTTCAAA AATCTATTAG CTATATCAAA  6420
AGCCTTACAT TTTAATATAG GTTGAACCAA AATTTCAATT CCAGTAACTT CTATTGTAAC  6480
CATTATTTTT GTGTATGTCT TCAAGAATGT TCATTGGATT TTTGTTTGTA ATAGTAAAAT  6540
ACCGGATACA TTTCACGTGT CCTTCAGTAT TGATTTGGTT GAATATTGGG TCATAATGGT  6600
TGAGAAGCAT GGACACTAGA GCCAGAATGC TTGGATATGA ATCCTGGATC TGTCACTTAC  6660
TTCTGTGTGA CCTTTGAAAG GCTACTTATT TCCTCTCTTA GCTTTCTCAT TAAAATCAAT  6720
GAACAATGCC AGCCTCATGG GGTTGTTGAA TGATTAAATT AGTTAATATA CCTAAAGTAC  6780
ATAGAACACT GCCTGCACAT AGTAAAAGAA TTATAAGTGT GAGGTAGTTG GTAAAATTAT  6840
GTAGTTGGAT ATACTACCGA ACAATATCTA ATCTCTTTTT AGGGAAATAA AGTTTGTGCA  6900
TATATATAAT CCCGAAACAT G
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Seq ID NO: 328 Protein sequence
Protein Accession #: NP_001932.1

15

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1          11         21         31         41         51
|          |          |          |          |          |
MAAAGPRRSV RGAVCLHLLL TLVIFSRDGE ACKKVILNVP SKLEADKIIG RVNLEECFRS  60
ADLIRSSDPD FRVLNDGSVY TARAVALSDK KRSFTIWLSD KRKQTQKEVT VLLEHQKKVS  120
KTRHTRETVL RRAKRRWAPI PCSMQENSLG PFPLFLQQVE SDAAQNYTVF YSISGRGVDK  180
EPLNLFYIER DTGNLFCTRP VDREEYDVFD LIAYASTADG YSADLPLPLP IRVEDENDNH  240
PVFTEAIYNF EVLESSRPGT TVGVVCATDR DEPDTMHTRL KYSILQQTPR SPGLFSVHPS  300
TGVITTVSHY LDREVVDKYS LIMKVQDMDG QFFGLIGTST CIITVTDSND NAPTFRQNAY  360
EAFVEENAFN VEILRIPIED KDLINTANWR VNPTILKGNE NGHFKISTDK ETNEGVLSVV  420
KPLNYEENRQ VNLEIGVNNE APFARDIPRV TALNRALVTV HVRDLDEGPE CTPAAQYVRI  480
KENLAVGSKI NGYKAYDPEN RNGNGLRYKK LHDPKGWITI DEISGSIITS KILDREVETP  540
KNELYNITVL AIDKDDRSCT GTLAVNIEDV NDNPPEILQE YVVICKPKMG YTDILAVDPD  600
EPVHGAPFYP SLPNTSPEIS RLWSLTKVND TAARLSYQKN AGFQEYTIPI TVKDRAGQAA  660
TKLLRVNLCE CTHPTQCRAT SRSTGVILGK WAILAILLGI ALLFSVLLTL VCGVPGATKG  720
KRFPEDLAQQ NLIISNTEAP GDDRVCSANG FMTQTTNNSS QGFCGTMGSG MKNGGQETIE  780
MMKGGNQTLE SCRGAGHHHT LDSCRGGHTE VDNCRYTYSE WHSPTQPRLG EKLHRCNQNE  840
DRMPSQDYVL TYNYEGRGSP AGSVGCCSEK QEEDGLDFLN NLEPKFITLA EACTKR
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Seq ID NO: 329 DNA sequence
Nucleic Acid Accession #: NM_016583.2
Coding sequence: 72..842

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1          11         21         31         41         51
|          |          |          |          |          |
GGAGTGGGGG AGAGAGAGGA GACCAGGACA GCTGCTGAGA CCTCTAAGAA GTCCAGATAC  60
TAAGAGCAAA GATGTTTCAA ACTGGGGGCC TCATTGTCTT CTACGGGCTG TTAGCCCAGA  120
CCATGGCCCA GTTTGGAGGC CTGCCCGTGC CCCTGGACCA GACCCTGCCC TTGAATGTGA  180
ATCCAGCCCT GCCCCTTGAGT CCCACAGGTC TTGCAGGAAG CTTGACAAAT GCCCTCAGCA  240
ATGGCCTGCT GTCTGGGGGC CTGTTGGGCA TTCTGGAAAA CCTTCCGCTC CTGGACATCC  300
TGAAGCCTGG AGGGAGGTACT TCTGGTGGCC TCCTTGGGGG ACTGCTTGGA AAAGTGACGT  360
CAGTGATTCC TGGCCTGAAC AACATCATTG ACATAAAGGT CACTGACCCC CAGCTGCTGG  420
AACTTGGCCT TGTGCAGAGC CCTGATGGCC ACCGTCTCTA TGTCACCATC CCTCTCGGCA  480
TAAAGCTCCA AGTGAATACG CCCCTGGTCG GTGCAAGTCT GTTGAGGCTG GCTGTGAAGC  540
TGGACATCAC TGCAGAAATC TTAGCTGTGA GAGATAAGCA GGAGAGGATC CACCTGGTCC  600
TTGGTGACTG CACCCATTCC CCTGGAAGCC TGCAAATTTC TCTGCTTGAT GGACTTGGCC  660
CCCTCCCCAT TCAAGGTCTT CTGGACAGCC TCACAGGGAT CTTGAATAAA GTCCTGCCTG  720
AGTTGGTTCA GGGCAACGTG TGCCCTCTGG TCAATGAGGT TCTCAGAGGC TTGGACATCA  780
CCCTGGTGCA TGACATTGTT AACATGCTGA TCCACGGACT ACAGTTTGTC ATCAAGGTCT  840
AAGCCTTCCA GGAAGGGGCT GGCCTCTGCT GAGCTGCTTC CCAGTGCTCA CAGATGCTG  900
GCCCATGTGC TGGAAGATGA CACAGTTGCC TTCTCCTCCGA GGAACCTGCC CCCTCTCCTT  960
TCCCACCAGG CGTGTGTAAC ATCCCATGTG CCTCACCTAA TAAAATGGCT CTTCTTCTGC  1020
AAAAAAAAAA AAAAAAAAAA AAAAAAAAA
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Seq ID NO: 330 Protein sequence
Protein Accession #: NP_057667.1

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1          11         21         31         41         51
|          |          |          |          |          |
MFQTGGLIVF YGLLAQTMAQ PGGLPVPLDQ TLPLNVNPAL PLSPTGLAGS LTNALSNGLL  60
SGGLLGILEN LPLLDILKPG GGTSGGLLGG LLGKVTSVIP GLNNIIDIKV TDPQLLELGL  120
VQSPDGHRLY VTIPLGIKLQ VNTPLVGASL LRLAVKLDIT ABILAVRDKQ ERIHLVLGDC  180
THSPGSLQIS LLDGLGPLPI QGLLDSLTGI LNKVLPELVQ GNVCPLVNEV LRGLDITLVH  240
DIVNMLIHGL QFVIKV
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Seq ID NO: 331 DNA sequence
Nucleic Acid Accession #: NM_004363.1
Coding sequence: 115..2223

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1          11         21         31         41         51
|          |          |          |          |          |
CTCAGGGCAG AGGGAGGAAG GACAGCAGAC CAGACAGTCA CAGCAGCCTT GACAAAACGT  60
TCCTGGAACT CAAGCTCTTC TCCACAGAGG AGGACAGAGC AGACAGCAGA GACCATGGAG  120
TCTCCCTCGG CCCCTCCCCA CAGATGGTGC ATCCCCTGGC AGAGGCTCCT GCTCACAGCC  180
TCACTTCTAA CCTTCTGGAA CCCGCCCACC ACTGCCAAGC TCACTATTGA ATCCACGCCG  240
TTCAATGTCG CAGAGGGGAA GGAGGTGCTT CTACTTGTCC ACAATCTGCC CCAGCATCTT  300
TTTGGCTACA GCTGGTACAA AGGTGAAAGA GTGGATGGCA ACCGTCAAAT TATAGGATAT  360
GTAAATAGGAA CTCAACAAGC TACCCCAGGG CCCGCATACA GTGGTCGAGA GATAATATAC  420
CCCAATGCAT CCCTGCTGAT CCAGAACATC ATCCAGAATG ACACAGGATT CTACACCCTA  480
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CACGTCATAA AGTCAGATCT TGTGAATGAA GAAGCAACTG GCCAGTTCCG GGTATACCCG  540
GAGCTGCCCA AGCCCTCCAT CTCCAGCAAC AACTCCAAAC CCGTGGAGGA CAAGGATGCT  600
GTGGCCTTCA CCTGTGAACC TGAGACTCAG GACGCAACCT ACCTGTGGTG GGTAAACAAT  660
CAGAGCCTCC CGGTCAGTCC CAGGCTGCAG CTGTCCAATG GCAACAGGAC CCTCACTCTA  720
TTCAATGTCA CAAGAAATGA CACAGCAAGC TACAAATGTG AAACCCAGAA CCCAGTGAGT  780
GCCAGGCGCA GTGATTCAGT CATCCTGAAT GTCCTCTATG GCCCGGATGC CCCCACCATT  840
TCCCCTCTAA ACACATCTTA CAGATCAGGG GAAAATCTGA ACCTCTCCTG CCACGCAGCC  900
TCTAACCCAC CTGCACAGTA CTCTTGGTTT GTCAATGGGA CTTTCCAGCA ATCCACCCAA  960
GAGCTCTTTA TCCCCAACAT CACTGTGAAT AATAGTGGAT CCTATACGTG CCAAGCCCAT  1020
AACTCAGACA CTGGCCTCAA TAGGACCACA GTCACGACGA TCACAGTCTA TGCAGAGCCA  1080
CCCAAACCCT TCATCACCAG CAACAACTCC AACCCCGTGG AGGATGAGGA TGCTGTAGCC  1140
TTAACCTGTG AACCTGAGAT TCAGAACACA ACCTACCTGT GGTGGGTAAA TAATCAGAGC  1200
CTCCCGGTCA GTCCCAGGCT GCAGCTGTCC AATGACAACA GGACCCCTCAC TCTACTCAGT  1260
GTCACAAGGA ATGATGTAGG ACCCTATGAG TGTGGAATCC AGAACGAATT AAGTGTTGAC  1320
CACAGCGACC CAGTCATCCT GAATGTCCTC TATGGCCCAG ACGACCCCAC CATTTCCCCC  1380
TCATACACCT ATTACCGTCC AGGGGTGAAC CTCAGCCTCT CCTGCCATGC AGCCTCTAAC  1440
CCACCTGCAC AGTATTCTTG GCTGATTGAT GGGAACATCC AGCAACACAC ACAAGAGCTC  1500
TTTATCTCCA ACATCACTGA GAAGAACAGC GGACTCTATA CCTGCCAGGC CAATAACTCA  1560
GCCAGTGGCC ACAGCAGGAC TACAGTCAAG ACAATCACAG TCTCTGCGGA GCTGCCCAAG  1620
CCCTCCATCT CCAGCAACAA CTCCAAACCC GTGGAGGACA AGGATGCTGT GGCCTTCACC  1680
TGTGAACCTG AGGCTCAGAA CACAACCTAC CTGTGGTGGG TAAATGGTCA GAGCCTCCCA  1740
GTCAGTCCCA GGCTGCAGCT GTCCAATGGC AACAGGACCC TCACTCTATT CAATGTCACA  1800
AGAAATGACG CAAGAGCCTA TGTATGTGGA ATCCAGAACT CTGAGTGC AAACCGCAGT  1860
GACCCAGTCA CCCTGGATGT CCTCTATGGG CCGGACACCC CCATCATTTC CCCCCCAGAC  1920
TCGTCTTACC TTTCGGGAGC GAACCTCAAC CTCTCCTGCC ACTCGGCCTC TAACCCATCC  1980
CCGCAGTATT CTTGGCGTAT CAATGGGATA CCGCAGCAAC ACACACAAGT TCTCTTTATC  2040
GCCAAAATCA CGCCAAATAA TAACGGGACC TATGCCTGTT TTGTCTCTAA CTTGGCTACT  2100
GGCCGCAATA ATTCCATAGT CAAGAGCATC ACAGTCTCTG CATCTGGAAC TTCTCCTGGT  2160
CTCTCAGCTG GGGCCACTGT CGGCATCATG ATTGGAGTGC TGGTTGGGGT TGCTCGTAGA  2220
TAGCAGCCCT GGTGTAGTTT CTTCATTTCA GGAAGACTGA CAGTTGTTTT GCTTCTTCCT  2280
TAAAGCATTT GCAACAGCTA CAGTCTAAAA TTGCTTCTTT ACCAAGGATA TTTACAGAAA  2340
AGACTCTGAC CAGAGATCGA GACCATCCTA GCCAACATCG TGAAACCCCA TCTCTACTAA  2400
AAATACAAAA ATGAGCTGGG CTTGGTGGCG CGCACCTGTA GTCCCAGTTA CTCGGGAGGC  2460
TGAGGCAGGA GAATCGCTTG AACCCGGGAG GTGGAGATTG CAGTGAGCCC AGATCGCACC  2520
ACTGCACTCC AGTCTGGCAA CAGAGCAAGA CTCCATCTCA AAAAGAAAAG AAAAGAAGAC  2580
TCTGACCTGT ACTCTTGAAT ACAAGTTTCT GATACCACTG CACTGTCTGA GAATTTCCAA  2640
AACTTTAATG AACTAACTGA CAGCTTCATG AAACTGTCCA CCAAGATCAA GCAGAGAAAA  2700
TAATTAATTT CATGGGACTA AATGAACTAA TGAGGATTGC TGATTCTTTA AATGTCTTGT  2760
TTCCCAGATT TCAGGAAACT TTTTTTCTTT TAAGCTATCC ACTCTTACAG CAATTTGATA  2820
AAATATACTT TTGTGAACAA AAATTGAGAC ATTTACATTT TCTCCCTATG TGGTCGCTCC  2880
AGACTTGGGA AACTATTCAT GAATATTTAT ATTGTATGGT AAATATAGTTA TTGCACAAGT  2940
TCAATAAAAA TCTGCTCTTT GTATAACAGA AAAA
```

Seq ID NO: 332 _Protein sequence_
Protein Accession #: NP_004354.1

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1         11        21        31        41        51
|         |         |         |         |         |
MESPSAPPHR WCIPWQRLLL TASLLTFWNP PTTAKLTIES TPFNVAEGKE VLLLVHNLPQ  60
HLFGYSWYKG ERVDGNRQII GYVIGTQQAT PGPAYSGREI IYPNASLLIQ NIIQNDTGFY  120
TLHVIKSDLV NEEATGQFRV YPELPKPSIS SNNSKPVEDK DAVAFTCEPE TQDATYLWWV  180
NNQSLPVSPR LQLSNGNRTL TLFNVTRNDT ASYKCETQNP VSARRSDSVI LNVLYGPDAP  240
TISPLNTSYR SGENLNLSCH AASNPPAQYS WFVNGTFQQS TQELFIPNIT VNNSGSYTCQ  300
AHNSDTGLNR TTVTTITVYA EPPKPFITSN NSNPVEDEDA VALTCEPEIQ NTTYLWWVNN  360
QSLPVSPRLQ LSNDNRTLTL LSVTRNDVGP YECGIQNELS VDHSDPVILN VLYGPDDPTI  420
SPSYTYYRPG VNLSLSCHAA SNPPAQYSWL IDGNIQQHTQ ELFISNITEK NSGLYTCQAN  480
NSASGHSRTT VKTITVSAEL PKPSISSNNS KPVEDKDAVA FTCEPEAQNT TYLWWVNGQS  540
LPVSPRLQLS NGNRTLTLFN VTRNDARAYV CGIQNSVSAN RSDPVTLDVL YGPDTPIISP  600
PDSSYLSGAN LNLSCHSASN PSPQYSWRIN GIPQQHTQVL FIAKITPNNN GTYACFVSNL  660
ATGRNNSIVK SITVSASGTS PGLSAGATVG IMIGVLVGVA LI
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Seq ID NO: 333 _DNA sequence_
Nucleic Acid Accession #: NM_006952.1
Coding sequence: 11..793

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1         11        21        31        41        51
|         |         |         |         |         |
AATCCCGACA ATGGCGAAAG ACAACTCAAC TGTTCGTTGC TTCCAGGGCC TGCTGATTTT  60
TGGAAATGTG ATTATTGGTT GTTGCGGCAT TGCCCTGACT GCGGAGTGCA TCTTCTTTGT  120
ATCTGACCAA CACAGCCTCT ACCCACTGCT TGAAGCCACC GACAACGATG ACATCTATGG  180
GGCTGCCTGG ATCGGCATAT TTGTGGGCAT CTGCCTCTTC TGCCTGTCTG TTCTAGGCAT  240
TGTAGGCATC ATGAAGTCCA GCAGGAAAAT TCTTCTGGCG TATTTCATTC TGATGTTTAT  300
AGTATATGCC TTTGAAGTGG CATCTTGTAT CACAGCAGCA ACACAACGAG ACTTTTTCAC  360
ACCCAACCTC TTCCTGAAGC AGATGCTAGA GAGGTACCAA AACACAGCC CTCCAAACAA  420
TGATGACCAG TGGAAAAACA ATGGAGTCAC CAAAACCTGG ACAGGCTCA TGCTCCAGGA  480
CAATTGCTGT GGCGTAAATG GTCCATCAGA CTGGCAAAAA TACACATCTG CCTTCCGGAC  540
TGAGAATAAT GATGCTGACT ATCCCTGGCC TCGTCAATGC TGTGTTATGA ACAATCTTAA  600
AGAACCTCTC AACCTGGAGG CTTGTAAACT AGGCGTGCCT GGTTTTTATC ACAATCAGGG  660
CTGCTATGAA CTGATCTCTG TCCAATGAA CCGACACGCC TGGGGGGTTG CCTGGTTTGG  720
ATTTGCCATT CTCTGCTGGA CTTTTTGGGT TCTCCTGGGT ACCATGTTCT ACTGGAGCAG  780
AATTGAATAT TAAGAA
```

Seq ID NO: 334 _Protein sequence_
Protein Accession #: NP_008883.1

```
        1        11        21        31        41        51
        |         |         |         |         |         |
     MAKDNSTVRC FQGLLIFGNV IIGCCGIALT AECIFFVSDQ HSLYPLLEAT DNDDIYGAAW    60
     IGIFVGICLF CLSVLGIVGI MKSSRKILLA YPILMFIVYA FEVASCITAA TQRDFFTPNL   120
     FLKQMLERYQ NNSPPNNDDQ WKNNGVTKTW DRLMLQDNCC GVNGPSDWQK YTSAFRTENN   180
     DADYPWPRQC CVMNNLKEPL NLEACKLGVP GFYHNQGCYE LISGPMNRHA WGVAWFGFAI   240
     LCWTFWVLLG TMFYWSRIEY
```

Seq ID NO: 335 DNA sequence
Nucleic Acid Accession #: NM_002638.1
Coding sequence: 120..473

```
        1        11        21        31        41        51
        |         |         |         |         |         |
     CAATACAGCT AAGGAATTAT CCCTTGTAAA TACCACAGAC CCGCCCTGGA GCCAGGCCAA    60
     GCTGGACTGC ATAAAGATTG GTATGGCCTT AGCTCTTAGC CAAACACCTT CCTGACACCA   120
     TGAGGGCCAG CAGCTTCTTG ATCGTGGTGG TGTTCCTCAT CGCTGGGACG CTGGTTCCTAG   180
     AGGCAGCTGT CACGGGAGTT CCTGTTAAAG GTCAAGACAC TGTCAAAGGC CGTGTTCCAT   240
     TCAATGGACA AGATCCCGTT AAAGGACAAG TTTCAGTTAA AGGTCAAGAT AAAGTCAAAG   300
     CGCAAGAGCC AGTCAAAGGT CCAGTCTCCA CTAAGCCTGG CTCCTGCCCC ATTATCTTGA   360
     TCCGGTGCGC CATGTTGAAT CCCCCTAACC GCTGCTTGAA AGATACTGAC TGCCCAGGAA   420
     TCAAGAAGTG CTGTGAAGGC TCTTGCGGGA TGGCCTGTTT CGTTCCCCAG TGAAGGGAGC   480
     CGGTCCTTGC TGCACCTGTG CCGTCCCCAG AGCTACAGGC CCCATCTGGT CCTAAGTCCC   540
     TGCTGCCCTT CCCCTTCCCA CACTGTCCAT TCTTCCTCCC ATTCAGGATG CCCACGGCTG   600
     GAGCTGCCTC TCTCATCCAC TTTCCAATAA A
```

Seq ID NO: 336 Protein sequence
Protein Accession #: NP_002629.1

```
        1        11        21        31        41        51
        |         |         |         |         |         |
     MRASSFLIVV VFLIAGTLVL EAAVTGVPVK GQDTVKGRVP FNGQDPVKGQ VSVKGQDKVK    60
     AQEPVKGPVS TKPGSCPIIL IRCAMLNPPN RCLKDTDCPG IKKCCEGSCG MACFVPQ
```

Seq ID NO: 337 DNA sequence
Nucleic Acid Accession #: NM_001793.2
Coding sequence: 71..2560

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        1        11        21        31        41        51
        |         |         |         |         |         |
     AAAGGGGCAA GAGCTGAGCG GAACACCGGC CCGCCGTCGC GGCAGCTGCT TCACCCCTCT    60
     CTCTGCAGCC ATGGGGCTCC CTCGTGGACC TCTCGCGTCT CTCCTCCTTC TCCAGGTTTG   120
     CTGGCTGCAG TGCGCGGCCT CCGAGCCGTG CCGGGCGGTC TTCAGGGGAGG CTGAAGTGAC   180
     CTTGGAGGCG GGAGGCGCGG AGCAGGAGCC CGGCCAGGCG GTTGGGGAAAG TATTCATGGC   240
     CTGCCCTGGG CAAGAGCCAG CTCTGTTTAG CACTGATAAT GATGACTTCA CTGTGCGGAA   300
     TGGCGAGACA GTCCAGGAAA GAAGGTCACT GAAGGAAAGG AATCCATTGA AGATCTTCCC   360
     ATCCAAACGT ATCTTACGAA GACACAAGAG AGATTGGGTG GTTGCTCCAA TATCTGTCCC   420
     TGAAAATGGC AAGGGTCCCT TCCCCCCAGAG ACTGAATCAG CTCAAGTCTA ATAAAGATAG   480
     AGACACCAAG ATTTTCTACA GCATCACGGG GCCGGGGGCA GACAGCCCCC CTGAGGGTGT   540
     CTTCGCTGTA GAGAAGGAGA CAGGCTGGTT GTTGTTGAAT AAGCCACTGG ACCGGGAGGA   600
     GATTGCCAAG TATGAGCTCT TTGGCCACGC TGTGTCAGAG AATGGTGCCT CAGTGGAGGA   660
     CCCCATGAAC ATCTCCATCA TCGTGACCGA CCAGAATGAC CACAAGCCCA AGTTTACCCA   720
     GGACACCTTC CGAGGGAGTG TCTTAGAGGG AGTCCTACCA GGTACTTCTG TGATGCAGGT   780
     GACAGCCACG GATGAGGATG ATGCCATCTA CACCTACAAT GGGGTGGTTG CTTACTCCAT   840
     CCATAGCCAA GAACCAAAGG ACCCACACGA CCTCATGTTC ACCATTCACC GGAGCACAGG   900
     CACCATCAGC GTCATCTCCA GTGGCCTGGA CCGGGAAAAA GTCCCTGAGT ACACACTGAC   960
     CATCCAGGCC ACAGACATGG ATGGGGACGG CTCCACCACC ACGGCAGTGG CAGTAGTGGA  1020
     GATCCTTGAT GCCAATGACA ATGCTCCCAT GTTTGACCCC CAGAAGTACG AGGCCCATGT  1080
     GCCTGAGAAT GCAGTGGGCC ATGAGGTGCA GAGGCTGACG GTCACTGATC TGGACGCCCC  1140
     CAACTCACCA GCGTGGCGTG CCACCTACCT TATCATGGGC GGTGACGACG GGGACCATTT  1200
     TACCATCACC ACCCACCCTG AGAGCAACCA GGGCATCCTG ACAACCAGGA AGGGTTTGGA  1260
     TTTTGAGGCC AAAAACCAGC ACACCCTGTA CGTTGAAGTG ACCAACGAGG CCCCTTTTGT  1320
     GCTGAAGCTC CCAACCTCCA CAGCCACCAT AGTGGTCCAC GTGGAGGATG TGAATGAGGC  1380
     ACCTGTGTTT GTCCCCACCCT CCAAAGTCGT TGAGGTCCAG GAGGGCATCC CCACTGGGGA  1440
     GCCTGTGTGT GTCTACACTG CAGAAGACCC TGACAAGGAG AATCAAAAGA TCAGCTACCG  1500
     CATCCTGAGA GACCCAGCAG GGTGGCTAGC CATGGACCCA GACAGTGGGC AGGTCACAGC  1560
     TGTGGGCACC CTCGACCGTG AGGATGAGCA GTTTGTGAGG AACAACATCT ATGAAGTCAT  1620
     GGTCTTGGCC ATGGACAATG AAGCCCTCC CACCACTGGC ACGGGAACCC TTCTGCTAAC  1680
     ACTGATTGAT GTCAATGACC ATGGCCCAGT CCCTGAGCCC CGTCAGATCA CCATCTGCAA  1740
     CCAAAGCCCT GTGCGCCAGG TGCTGAACAT CACGGACAAG GACCTGTCTC CCCACACCTC  1800
     CCCTTTCCAG GCCCAGCTCA CAGATGACTC AGACATCTAC TGGACGGCAG AGGTCAACGA  1860
     GGAAGGTGAC ACAGTGGTCT TGTCCCTGAA GAAGTTCCTG AAGCAGGATA CATATGACGT  1920
     GCACCTTTCT CTGTCTGACC ATGGCAACAA AGAGCAGCTG ACGGTGATCA GGGCCACTGT  1980
     GTGCGACTGC CATGGCCATG TCGAAACCTG CCCTGGACCC TGGAAGGGAG GTTTCATCCT  2040
     CCCTGTGCTG GGGGCTGTCC TGGCTCTGCT GTTCCTCCTG CTGGTGCTGC TTTTGTTGGT  2100
     GAGAAAGAAG CGGAAGATCA AGGAGCCCCT CCTACTCCCA CCCGTGACAA  2160
     CGTCTTCTAC TATGGCGAAG AGGGGGGGTG CGAAGAGGAC CAGGACTATG ACATCACCCA  2220
     GCTCCACCGA GGTCTGGAGG CCAGGCCGGA GGTGGTTCTC CGCAATGACG TGGCACCAAC  2280
     CATCATCCCG ACACCCATGT ACCGTCCTCG GCCAGCCAAC CCAGATGAAA TCGGCAACTT  2340
     TATAATTGAG AACCTGAAGG CGGCTAACAC AGACCCCACA GCCCCGCCCT ACGACACCCT  2400
     CTTGGTGTTC GACTATGAGG GCAGCGGCTC CGACGCCGCG TCCCTGAGCT CCCTCACCTC  2460
     CTCCGCCTCC GACCAAGACC AAGATTACGA TTATCTGAAC GAGTGGGGCA GCCGCTTCAA  2520
     GAAGCTGGCA GACATGTACG GTGGCGGGGA GGACGACTAG GCGGCCTGCC TGCAGGGCTG  2580
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        GGGACCAAAC GTCAGGCCAC AGAGCATCTC CAAGGGGTCT CAGTTCCCCC TTCAGCTGAG 2640
        GACTTCGGAG CTTGTCAGGA AGTGGCCGTA GCAACTTGGC GGAGACAGGC TATGAGTCTG 2700
        ACGTTAGAGT GGTTGCTTCG TTAGCCTTTC AGGATGGAGG AATGTGGGCA GTTTGACTTC 2760
5       AGCACTGAAA ACCTCTCCAC CTGGGCCAGG GTTGCCTCAG AGGCCAAGTT TCCAGAAGCC 2820
        TCTTACCTGC CGTAAAATGC TCAACCCTGT GTCCTGGGCC TGGGCCTGCT GTGACTGACC 2880
        TACAGTGGAC TTTCTCTCTG GAATGGAACC TTCTTAGGCC TCCTGGTGCA ACTTAATTTT 2940
        TTTTTTTAAT GCTATCTTCA AAACGTTAGA GAAAGTTCTT CAAAAGTGCA GCCCAGAGCT 3000
        GCTGGGCCCA CTGGCCGTCC TGCATTTCTG GTTTCAGAC  CCCAATGCCT CCCATTCGGA 3060
        TGGATCTCTG CGTTTTTATA CTGAGTGTGC CTAGGTTGCC CCTTATTTTT TATTTTCCCT 3120
10      GTTGCGTTGC TATAGATGAA GGGTGAGGAC AATCGTGTAT ATGTACTAGA ACTTTTTTAT 3180
        TAAAGAAACT TTTCCCAGAA AAAAA
```

Seq ID NO: 338 Protein sequence
Protein Accession #: NP_001784.2

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        1          11         21         31         41         51
        |          |          |          |          |          |
        MGLPRGPLAS LLLLQVCWLQ CAASEPCRAV FREAEVTLEA GGAEQEPGQA LGKVFMGCPG  60
        QEPALFSTDN DDFTVRNGET VQERRSLKER NPLKIFPSKR ILRRHKRDWV VAPISVPENG 120
        KGPFPQRLNQ LKSNKDRDTK IFYSITGPGA DSPPEGVFAV EKETGWLLLN KPLDREEIAK 180
        YELFGHAVSE NGASVEDPMN ISIIVTDQND HKPKFTQDTF RGSVLEGVLP GTSVMQVTAT 240
        DEDDAIYTYN GVVAYSIHSQ EPKDPHDLMF TIHRSTGTIS VISSGLDREK VPEYTLTIQA 300
        TDMDGDGSTT TAVAVVEILD ANDNAPMFDP QKYEAHVPEN AVGHEVQRLT VTDLDAPNSP 360
        AWRATYLIMG GDDGDHFTIT THPESNQGIL TTRKGLDFEA KNQHTLYVEV TNEAPFVLKL 420
        PTSTATIVVH VEDVNEAPVF VPPSKVVEVQ EGIPTGEPVC VYTAEDPDKE NQKISYRILR 480
        DPAGWLAMDP DSGQVTAVGT LDREDEQFVR NNIYEVMVLA MDNGSPPTTG TGTLLLTLID 540
        VNDHGPVPEP RQITICNQSP VRQVLNITDK DLSPHTSPFQ AQLTDDSDIY WTAEVNEEGD 600
        TVVLSLKKFL KQDTYDVHLS LSDHGNKEQL TVIRATVCDC HGHVETCPGP WKGGPILPVL 660
        GAVLALLFLL LVLLLLVRKK RKIKEPLLLP EDDTRDNVFY YGEEGGGEED QDYDITQLHR 720
        GLEARPEVVL RNDVAPTIIP TPMYRPRPAN PDEIGNFIIE NLKAANTDPT APPYDTLLVF 780
        DYEGSGSDAA SLSSLTSSAS DQDQDYDYLN EWGSRFKKLA DMYGGGEDD
```

Seq ID NO: 339 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..672

```
        1          11         21         31         41         51
        |          |          |          |          |          |
        ATGAGGCTCC AAAGACCCCG ACAGGCCCG GCGGGTGGGA GGCGCGCGCC CCGGGGCGGG  60
        CGGGGCTCCC CCTACCGGCC AGACCCGGGG AGAGGCGCGC GGAGGCTGCG AAGGTTCCAG 120
        AAGGGCGGGG AGGGGGCGCC GCGCGCTGAC CCTCCCTGGG CACCGCTGGG GACGATGGCG 180
        CTGCTCGCCT TGCTGCTGGT CGTGGCCCTA CCGCGGGTGT GGACAGACGC CAACCTGACT 240
        GCGAGACACA GAGATCCAGA GGACTCCCAG CGAACGGACG AGGGTGACAA TAGAGTGTGG 300
        TGTCATGTTT GTGAGAGAGA AAACACTTTC GAGTGCCAGA ACCCAAGGAG GTGCAAATGG 360
        ACAGAGCCAT ACTGCGTTAT AGCGGCCGTG AAAATATTTC CACGTTTTTT CATGGTTGCG 420
        AAGCAGTGCT CCGCTGGTTG TGCAGCGATG GAGAGACCCA AGCCAGAGGA GAAGCGGTTT 480
        CTCCTGGAAG AGCCCATGCC CTTCTTTTAC CTCAAGTGTT GTAAAATTCG CTACTGCAAT 540
        TTAGAGGGGC CACCTATCAA CTCATCAGTG TTCAAAGAAT ATGCTGGGAG CATGGGTGAG 600
        AGCTGTGGTG GGCTGTGGCT GGCCATCCTC CTGCTGCTGG CCTCCATTGC AGCCGGCCTC 660
        AGCCTGTCTT GA
```

Seq ID NO: 340 Protein sequence
Protein Accession #: Eos sequence

```
        1          11         21         31         41         51
        |          |          |          |          |          |
        MRLQRPRQAP AGGRRAPRGG RGSPYRPDPG RGARRLRRFQ KGGEGAPRAD PPWAPLGTMA  60
        LLALLLVVAL PRVWTDANLT ARQRDPEDSQ RTDEGDNRVW CHVCERENTF ECQNPRRCKW 120
        TEPYCVIAAV KIFPRFFMVA KQCSAGCAAM ERPKPEEKRF LLEEPMPFFY LKCCKIRYCN 180
        LEGPPINSSV FKEYAGSMGE SCGGLWLAIL LLLASIAAGL SLS
```

Seq ID NO: 341 DNA sequence
Nucleic Acid Accession #: XM_035292.2
Coding sequence: 53..1576

```
        1          11         21         31         41         51
        |          |          |          |          |          |
        GCTCGCTGGG CCGCGGCTCC CGGGTGTCCC AGGCCCGGCC GGTGCGCAGA GCATGGCGGG  60
        TGCGGGCCCG AAGCGGCGCG CGCTAGCGGC GCCGGCGGCC GAGGAGAAGG AAGAGGCGCG 120
        GGAGAAGATG CTGGCCGCCA AGAGCGCGGA CGGCTCGGCG CCGGCAGGCG AGGGCGAGGG 180
        CGTGACCCTG CAGCGGAACA TCACGCTGCT CAACGGCGTG GCCATCATCG TGGGGACCAT 240
        TATCGGCTCG GGCATCTTCG TGACGCCCAC GGGCGTGCTC AAGGAGGCAG GCTCGCCGGG 300
        GCTGGCGCTG GTGGTGTGGG CCGCGTGCGG CGTCTTCTCC ATCGTGGGCG CGCTCTGCTA 360
        CGCGGAGCTC GGCACCACCA TCTCCAAATC GGGCGGCGAC TACGCCTACA TGCTGGAGGT 420
        CTACGGCTCG CTGCCCGCCT TCCTCAAGCT CTGGATCGAG CTGCTCATCA TCCGGCCTTC 480
        ATCGCAGTAC ATCGTGGCCC TGGTCTTCGC CACCTACCTG CTCAAGCCGC TCTTCCCCAC 540
        CTGCCCGGTG CCCGAGGAGG CAGCCAAGCT CGTGGCCTGC CTCTGCGTGC TGCTGCTCAC 600
        GGCCGTGAAC TGCTACAGCG TGAAGGCCGC CACCCGGGTC CAGGATGCCT TTGCCGCCGC 660
        CAAGCTCCTG GCCCTGAGCC CTGATCATCCT GCTGGGCTTC GTCCAGATCG GAAAGGGTGA 720
        TGTGTCCAAT CTAGATCCCA ACTTCTCATT TGAAGGCACC AAACTGGATG TGGGGAACAT 780
        TGTGCTGGCA TTATACAGCG GCCTCTTTGC CTATGGAGGA TGGAATTACT TGAATTTCGT 840
        CACAGAGGAA ATGATCAACC CCTACAGAAA CCTGCCCCTG GCCATCATCA TCTCCCTGCC 900
        CATCGTGACG CTGGTGTACG TGCTGACCAA CCTGGCCTAC TTCACCACCC TGTCCACCGA 960
        GCAGATGCTG TCGTCCGAGG CCGTGGCCGT GGACTTCGGG AACTATCACC TGGGCGCTCAT 1020
```

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        GTCCTGGATC ATCCCCGTCT TCGTGGGCCT GTCCTGCTTC GGCTCCGTCA ATGGGTCCCT   1080
        GTTCACATCC TCCAGGCTCT TCTTCGTGGG GTCCCGGGAA GGCCACCTGC CCTCCATCCT   1140
        CTCCATGATC CACCCACAGC TCCTCACCCC CGTGCGTCC CTCGTGTTCA CGTGTGTGAT    1200
        GACGCTGCTC TACGCCTTCT CCAAGGACAT CTTCTCCGTC ATCAACTTCT TCAGCTTCTT   1260
5       CAACTGGCTC TGCGTGGCCC TGGCCATCAT CGGCATGATC TGGCTGCGCC ACAGAAAGCC   1320
        TGAGCTTGAG CGGCCCATCA AGGTGAACCT GGCCCTGCCT GTGTTCTTCA TCCTGGCCTG   1380
        CCTCTTCCTG ATCGCCGTCT CCTTCTGGAA GACACCCGTG GAGTGTGGCA TCGGCTTCAC   1440
        CATCATCCTC AGCGGGCTGC CCGTCTACTT CTTCGGGGTC TGGTGGAAAA ACAAGCCCAA   1500
        GTGGCTCCTC CAGGGCATCT TCTCCACGAC CGTCCTGTGT CAGAAGCTCA TGCAGGTGGT   1560
10      CCCCCAGGAG ACATAGCCAG GAGGCCGAGT GGCTGCCGGA GGAGCATGC
```

Seq ID NO: 342 <u>Protein sequence</u>
Protein Accession #: XP_035292.2

```
        1           11          21          31          41          51
        |           |           |           |           |           |
        MAGAGPKRRA LAAPAAEEKE EAREKMLAAK SADGSAPAGE GEGVTLQRNI TLLNGVAIIV   60
        GTIIGSGIFV TPTGVLKEAG SPGLALVVWA ACGVFSIVGA LCYAELGTTI SKSGGDYAYM   120
        LEVYGSLPAF LKLWIELLII RPSSQYIVAL VFATYLLKPL FPTCPVPEEA AKLVACLCVL   180
        LLTAVNCYSV KAATRVQDAF AAAKLLALAL IILLGFVQIG KGDVSNLDPN FSFEGTKLDV   240
        GNIVLALYSG LFAYGGWNYL NFVTEEMINP YRNLPLAIII SLPIVTLVYV LTNLAYFTTL   300
        STEQMLSSEA VAVDFGNYHL GVMSWIIPVF VGLSCFGSVN GSLFTSSRLF FVGSREGHLP   360
        SILSMIHPQL LTPVPSLVFT CVMTLLYAFS KDIFSVINFF SFFNWLCVAL AIIGMIWLRH   420
        RKPELERPIK VNLALPVFFI LACLFLIAVS FWKTPVECGI GFTIILSGLP VYFFGVWWKN   480
        KPKWLLQGIF STTVLCQKLM QVVPQET
```

Seq ID NO: 343 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_005268.1
Coding sequence: 168..989

```
        1           11          21          31          41          51
        |           |           |           |           |           |
        TAAAAAGCAA AAGAATTCGC GGCCGCGTCG ACACGGGCTT CCCCGAAAAC CTTCCCCGCT   60
        TCTGGATATG AAATTCAAGC TGCTTGCTGA GTCCTATTGC CGGCTGCTGG GAGCCAGGAG   120
        AGCCCTGAGG AGTAGTCACT CAGTAGCAGC TGACGCGTGG ACCACCATG AACTGGAGTA    180
        TCTTTGAGGG ACTCCTGAGT GGGGTCAACA AGTACTCCAC AGCCTTTGGG CGGCATCTGGC  240
        TGTCTCTGGT CTTCATCTTC CGCGTGCTGG TGTACCTGGT GACGGCCGAG CGTGTGTGGA   300
        GTGATGACCA CAAGGACTTC GACTGCAATA CTCGCCAGCC CGGCTGCTCC AACGTCTGCT   360
        TTGATGAGTT CTTCCCTGTG TCCCATGTGC GCCTCTGGGC CCTGCAGCTT ATCCTGGTGA   420
        CATGCCCCTC ACTGCTCGTG GTCATGCACG TGGCCTACCG GGAGGTTCAG GAGAAGAGGC   480
        ACCGAGAAGC CCATGGGGAG AACAGTGGGC GCCTCTACCT GAACCCCGGC AAGAAGCGGG   540
        GTGGGCTCTG GTGGACATAT GTCTGCAGCC TAGTGTTCAA GGCGAGCGTG GACATCGCCT   600
        TTCTCTATGT GTTCCACTCA TTCTACCCCA AATATATCCT CCCTCCTGTG GTCAAGTGCC   660
        ACGCAGATCC ATGTCCCAAT ATAGTGGACT GCTTCATCTC CAAGCCCTCA GAGAAGAACA   720
        TTTTCACCCT CTTCATGGTG GCCACAGCTG CCATCTGCAT CCTGCTCAAC CTCGTGGAGC   780
        TCATCTACCT GGTGAGCAAG AGATGCCACG AGTGCCTGGC AGCAAGGAAA GCTCAAGCCA   840
        TGTGCACAGG TCATCACCCC CACGGTACCA CCTCTTCCTG CAAACAAGAC GACCTCCTTT   900
        CGGGTGACCT CATCTTTCTG GGCTCAGACA GTCATCCTCC TCTCTTACCA GACCGGCCCG   960
        GAGACCATGT GAAGAAAACC ATCTTGTGAG GGGCTGCCTG GACTGGCTG GCAGGTTGGG    1020
        CCTGGATGGG GAGGCTCTAG CATCTCTCAT AGGTGCAACC TGAGAGTGGG GGAGCTAAGC   1080
        CATGAGGTAG GGGCAGGCAA GAGAGAGGAT TCAGACGCTC TGGGAGCCAG TTCCTAGTCC   1140
        TCAACTCCAG CCACCTGCCC CAGCTCGACG GCACTGGGCC AGTTCCCCCT CTGCTCTGCA   1200
        GCTCGGTTTC CTTTTCTAGA ATGGAAATAG TGAGGGCCAA TGC
```

Seq ID NO: 344 <u>Protein sequence</u>
Protein Accession #: NP_005259.1

```
        1           11          21          31          41          51
        |           |           |           |           |           |
        MNWSIFEGLL SGVNKYSTAF GRIWLSLVFI FRVLVYLVTA ERVWSDDHKD FDCNTRQPGC   60
        SNVCFDEFFP VSHVRLWALQ LILVTCPSLL VVMHVAYREV QEKRHREAHG ENSGRLYLNP   120
        GKKRGGLWWT YVCSLVFKAS VDIAFLYVFH SFYPKYILPP VVKCHADPCP NIVDCFISKP   180
        SEKNIFTLFM VATAAICILL NLVELIYLVS KRCHECLAAR KAQAMCTGHH PHGTTSSCKQ   240
        DDLLSGDLIF LGSDSHPPLL PDRPRDHVKK TIL
```

Seq ID NO: 345 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_002391.1
Coding sequence: 26..457

```
        1           11          21          31          41          51
        |           |           |           |           |           |
        CGGGCGAAGC AGCGCGGGCA GCGAGATGCA GCACCGAGGC TTCCTCCTCC TCACCCTCCT   60
        CGCCCTGCTG GCGCTCACCT CCGCGGTCGC CAAAAAGAAA GATAAGGTGA AGAAGGGCGG   120
        CCCGGGGAGC GAGTGCGCTG AGTGGGCCTG GGGGCCCTGC ACCCCCAGCA GCAAGGATTG   180
        CGGCGTGGGT TTCCGCGAGG GCACCTGCGG GGCCCAGACC CAGCGGCATCC GGTGCAGGGT   240
        GCCCTGCAAC TGGAAGAAGG AGTTTGGAGC CGACTGCAAG TACAAGTTTG AGAACTGGGG   300
        TGCGTGTGAT GGGGGCACAG GCACCAAAGT CCGCCAAGGC ACCCTGAAGA AGGCGCGCTA   360
        CAATGCTCAG TGCCAGGAGA CCATCCGCGT CACCAAGCCC TGCACCCCCA AGACCAAAGC   420
        AAAGGCCAAA GCCAAGAAAG GGAAGGGAAA GGACTAGACG CCAAGCCTGG ATGCCAAGGA   480
        GCCCCTGGTG TCACATGGGG CCTGGCCACG CCCTCCCTCT CCCAGGCCCG AGATGTGACC   540
        CACCAGTGCC TTCTGTCTGC TCGTTAGCTT TAATCAATCA TGCCCTGCCT TGTCCCTCTC   600
        ACTCCCCAGC CCCACCCCTA AGTGCCCAAA GTGGGGAGGG ACAAGGGATT CTGGGAAGCT   660
        TGAGCCTCCC CCAAAGCAAT GTGAGTCCCA GAGCCCGCTT TTGTTCTTCC CCACAATTCC   720
        ATTACTAAGA AACACATCAA ATAAACTGAC TTTTTCCCCC CAATAAAAGC TCTTCTTTTT   780
```

TAATAT

Seq ID NO: 346 Protein sequence
Protein Accession #: NP_002382.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MQHRGFLLLT LLALLALTSA VAKKKDKVKK GGPGSECAEW AWGPCTPSSK DCGVGFREGT    60
CGAQTQRIRC RVPCNWKKEF GADCKYKFEN WGACDGGTGT KVRQGTLKKA RYNAQCQETI   120
RVTKPCTPKT KAKAKAKKGK GKD
```

Seq ID NO: 347 DNA sequence
Nucleic Acid Accession #: NM_006783.1
Coding sequence: 1..786

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGGATTGGG GGACGCTGCA CACTTTCATC GGGGGTGTCA ACAAACACTC CACCAGCATC    60
GGGAAGGTGT GGATCACAGT CATCTTTATT TTCCGAGTCA TGATCCTAGT GGTGGCTGCC   120
CAGGAAGTGT GGGGTGACGA GCAAGAGGAC TTCGTCTGCA ACACACTGCA ACCGGGATGC   180
AAAAATGTGT GCTATGACCA CTTTTTCCCG GTGTCCCACA TCCGGCTGTG GGCCCTCCAG   240
CTGATCTTCG TCTCCACCCC AGCGCTGCTG GTGGCCATGC ATGTGGCCTA CTACAGGCAC   300
GAAACCACTC GCAAGTTCAG GCGAGGAGAG AAGAGGAATG ATTTCAAAGA CATAGAGGAC   360
ATTAAAAAGC ACAAGGTTCG GATAGAGGGG TCGCTGTGGT GGACGTACAC CAGCAGCATC   420
TTTTTCCGAA TCATCTTTGA AGCAGCCTTT ATGTATGTGT TTTACTTCCT TTACAATGGG   480
TACCACCTGC CCTGGGTGTT GAAATGTGGG ATTGACCCCT GCCCCAACCT TGTTGACTGC   540
TTTATTTCTA GGCCAACAGA GAAGACCGTG TTTACCATTT TTATGATTTC TGCGTCTGTG   600
ATTTGCATGC TGCTTAACGT GGCAGAGTTG TGCTACCTGC TGCTGAAAGT GTGTTTTAGG   660
AGATCAAAGA GAGCACAGAC GCAAAAAAAT CACCCCAATC ATGCCCTAAA GGAGAGTAAG   720
CAGAATGAAA TGAATGAGCT GATTTCAGAT AGTGGTCAAA ATGCAATCAC AGGTTTCCCA   780
AGCTAA
```

Seq ID NO: 348 Protein sequence
Protein Accession #: NP_006774.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MDWGTLHTFI GGVNKHSTSI GKVWITVIFI FRVMILVVAA QEVWGDEQED FVCNTLQPGC    60
KNVCYDHFPP VSHIRLWALQ LIFVSTPALL VAMHVAYYRH ETTRKFRRGE KRNDFKDIED   120
IKKHKVRIEG SLWWTYTSSI FFRIIFEAAF MYVFYFLYNG YHLPWVLKCG IDPCPNLVDC   180
PISRPTEKTV FTIFMISASV ICMLLNVAEL CYLLLKVCFR RSKRAQTQKN HPNHALKESK   240
QNEMNELISD SGQNAITGFP S
```

Seq ID NO: 349 DNA sequence
Nucleic Acid Accession #: NM_002571.1
Coding sequence: 99..587

```
1          11         21         31         41         51
|          |          |          |          |          |
CATCCCTCTG GCTCCAGAGC TCAGAGCCAC CCACAGCCGC AGCCATGCTG TGCCTCCTGC    60
TCACCCTGGG CGTGGCCCTG GTCTGTGGTG TCCCGGCCAT GGACATCCCC CAGACCAAGC   120
AGGACCTGGA GCTCCCAAAG TTGGCAGGGA CCTGGCACTC CATGGCCATG GCGACCAACA   180
ACATCTCCCT CATGGCGACA CTGAAGGCCC TCTCTGAGGGT CCACATCACC TCACTGTTGC   240
CCACCCCCGA GGACAACCTG GAGATCGTTC TGCACAGATG GGAGAACAAC AGCTGTGTTG   300
AGAAGAAGGT CCTTGGAGAG AAGACTGGGA ATCCAAAGAA GTTCAAGATC AACTATACGG   360
TGGCGAACGA GGCCACGCTG CTCGATACTG ACTACGACAA TTTTCCTGTTT CTCTGCCTAC   420
AGGACACCAC CACCCCCATC CAGAGCATGA TGTGTCCAGTA CCTGGCCAGA GTCCTGGTGG   480
AGGACGATGA GATCATGCAG GGATTCATCA GGGCTTTCAG GCCCCTGCCC AGGCACCTAT   540
GGTACTTGCT GGACTTGAAA CAGATGGAAG AGCCGTGCCG TTTCTAGCTC ACCTCCGCCT   600
CCAGGAAGAC CAGACTCCCA CCCTTCCACA CCTCCAGAGC AGTGGGACTT CCTCCTGCCC   660
TTTCAAAGAA TAACCACAGC TCAGAAGACG ATGACGTGGT CATCTGTGTC GCCATCCCCT   720
TCCTGCTGCA CACCTGCACC ATTGCCATGG GGAGGCTGCT CCCTGGGGGC AGAGTCTCTG   780
GCAGAGGTTA TTAATAAACC CTTGGAGCAT G
```

Seq ID NO: 350 Protein sequence
Protein Accession #: NP_002562.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MDIPQTKQDL ELPKLAGTWH SMAMATNNIS LMATLKAPLR VHITSLLPTP EDNLEIVLHR    60
WENNSCVEKK VLGEKTGNPK KFKINYTVAN EATLLDTDYD NFLFLCLQDT TTPIQSMMCQ   120
YLARVLVEDD EIMQGFIRAF RPLPRHLWYL LDLKQMEEPC RF
```

Seq ID NO: 351 DNA sequence
Nucleic Acid Accession #: NM_006500.1
Coding sequence: 27..1967

```
1          11         21         31         41         51
|          |          |          |          |          |
ACTTGCGTCT CGCCCTCCGG CCAAGCATGG GGCTTCCCAG GCTGGTCTGC GCCTTCTTGC    60
TCGCCGCCTG CTGCTGCTGT CCTCGCGTCG CGGGTGTGCC CGGAGAGGCC GAGCAGCCTG   120
CGCCTGAGCT GGTGGAGGTG GAAGTGGGCA GCACAGCCCT TCTGAAGTGC GGCCTCTCCC   180
AGTCCCAAGG CAACCTCAGC CATGTCGACT GGTTTTCTGT CCACAAGGAG AAGCGGACGC   240
TCATCTTCCG TGTGCGCCAG GGCCAGGGCC AGAGCGAACC TGGGGAGTAC GAGCAGCGGC   300
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          TCAGCCTCCA GGACAGAGGG GCTACTCTGG CCCTGACTCA AGTCACCCCC CAAGACGAGC    360
          GCATCTTCTT GTGCCAGGGC AAGCGCCCTC GGTCCCAGGA GTACCGCATC CAGCTCCGCG    420
          TCTACAAAGC TCCGGAGGAG CCAAACATCC AGGTCAACCC CCTGGGCATC CCTGTGAACA    480
          GTAAGGAGCC TGAGGAGGTC GCTACCTGTG TAGGGAGGAA CGGGTACCCC ATTCCTCAAG    540
5         TCATCTGGTA CAAGAATGGC CGGCCTCTGA AGGAGGAGAA GAACCGGGTC CACATTCAGT    600
          CGTCCCAGAC TGTGGAGTCG AGTGGTTTGT ACACCTTGCA GAGTATTCTG AAGGCACAGC    660
          TGGTTAAAGA AGACAAAGAT GCCCAGTTTT ACTGTGAGCT CAACTACCGG CTGCCCAGTG    720
          GGAACCACAT GAAGGAGTCC AGGGAAGTCA CCGTCCCTGT TTTCTACCCG ACAGAAAAAG    780
          TGTGGCTGGA AGTGGAGCCC GTGGGAATGC TGAAGGAAGG GGACCGCGTG GAAATCAGGT    840
10        GTTTGGCTGA TGGCAACCCT CCACCACACT TCAGCATCAG CAAGCAGAAC CCCAGCACCA    900
          GGGAGGCAGA GGAAGAGACA ACCAACGACA ACGGGGTCCT GGTGCTGGAG CCTGCCCGGA    960
          AGGAACACAG TGGGCGCTAT GAATGTCAGG CCTGGAACTT GGACACCATG ATATCGCTGC   1020
          TGAGTGAACC ACAGGAACTA CTGGTGAACT ATGTGTCTGA CGTCCGAGTG AGTCCCGCAG   1080
          CCCCTGAGAG ACAGGAAGGC AGCAGCCTCA CCCTGACCTG TGAGGCAGAG AGTAGCCAGG   1140
15        ACCTCGAGTT CCAGTGGCTG AGAGAAGAGA CAGACCAGGT GCTGGAAAGG GGGCCTGTGC   1200
          TTCAGTTGCA TGACCTGAAA CGGGAGGCAG GAGGCGGCTA TCGCTGCGTG GCCGTCTGTGC  1260
          CCAGCATACC CGGCCTGAAC CGCACACAGC TGGTCAAGCT GGCCATTTTT GGCCCCCCTT   1320
          GGATGGCATT CAAGGAGAGG AAGGTGTGGG TGAAAGAGAA TATGGTGTTG AATCTGTCTT   1380
          GTGAAGCGTC AGGGCACCCC CGGCCCACCA TCTCCTGGAA CGTCAACGGC ACGGCAAGTG   1440
20        AACAAGACCA AGATCCACAG CGAGTCCTGA GCACCCTGAA TGTCCTCGTG ACCCCGGAGC   1500
          TGTTGGAGAC AGGTGTTGAA TGCACGGCCT CCAACGACCT GGGCAAAAAC ACCAGCATCC   1560
          TCTTCCTGGA GCTGGTCAAT TTAACCACCC TCACACCAGA CTCCAACACA ACCACTGGCC   1620
          TCAGCACTTC CACTGCCAGT CCTCATACCA GAGCCAACAG CACCTCCACA GAGAGAAAGC   1680
          TGCCGGAGCC GGAGAGCCGG GGCGTGGTCA TCGTGGCTGT GATTGTGTGC ATCCTGGTCC   1740
25        TGGCGGTGCT GGGCGCTGTC CTCTATTTCC TCTATAAGAA GGGCAAGCTG CCGTGCAGGC   1800
          GCTCAGGGAA GCAGGAGATC ACGCTGCCCC CGTCTCGTAA GACCGAACTT GTAGTTGAAG   1860
          TTAAGTCAGA TAAGCTCCCA GAAGAGATGG GCCTCCTGCA GGGCAGCAGC GGTGACAAGA   1920
          GGGCTCCGGG AGACCAGGGA GAGAAATACA TCGATCTGAG GCATTAGCCC CGAATCACTT   1980
          CAGCTCCCTT CCCTGCCTGG ACCATTCCTG GCTCCCTGCT CACTCTTCTC TCAGCCAAAG   2040
30        CCTCCAAAGG GACTAGAGAG AAGCCTCCTG CTCCCCTCAC CTGCACACCC CCTTTCAGAG   2100
          GGCCACTGGG TTAGGACCTG AGGACCTCAC TTGGCCCTGC AAGCCGCTTT TCAGGGACCA   2160
          GTCCACCACC ATCTCCTCCA CGTTGAGTGA AGCTCATCCC AAGCAAGGAG CCCCAGTCTC   2220
          CCGAGCGGGT AGGAGAGTTT CTTGCAGAAC GTGTTTTTTC TTTACACACA TTATGGCTGT   2280
          AAATACCTGG CTCCTGCCAG CAGCTGAGCT GGGTAGCCTC TCTGAGCTGG TTTCCTGCCC   2340
35        CAAAGGCTGG CTTCCACCAT CCAGGTGCAC CACTGAAGTG AGGACACACC GGAGCCAGGC   2400
          GCCTGCTCAT GTTGAAGTGC GCTGTTCACA CCCGCTCCGG AGAGCACCCC AGCGGCATCC   2460
          AGAAGCAGCT GCAGTGTTGC TGCCACCACC CTCCTGCTCG CCTCTTCAAA GTCTCCTGTG   2520
          ACATTTTTTC TTTGGTCAGA AGCCAGGAAC TGGTGTCATT CCTTAAAAGA TACGTGCCGG   2580
          GGCCAGGTGT GGTGGCTCAC GCCTGTAATC CCAGCACTTT GGGAGGCCGA GGCGGGCGGA   2640
40        TCACAAAGTC AGGACGAGAC CATCCTGGCT AACACGGTGA AACCCTGTCT CTACTAAAAA   2700
          TACAAAAAAA AATTAGCTAG GCGTAGTGGT TGGCACCTAT AGTCCCAGCT ACTCGGAAGG   2760
          CTGAAGCAGG AGAATGGTAT GAATCCAGGA GGTGGAGCTT GCAGTGAGCC GAGACCGTGC   2820
          CACTGCACTC CAGCCTGGGC AACACAGCGA GACTCCGTCT CGAGGAAAAA AAAAGAAAAG   2880
          ACGCGTACCT GCGGTGAGGA AGCTGGGCGC TGTTTTCGAG TTCAGGTGAA TTAGCCTCAA   2940
45        TCCCGTGTGT TCACTTGCTCC CATAGCCCTC TTGATGGATC ACGTAAAACT GAAAGGCAGC   3000
          GGGGAGCAGA CAAAGATGAG GTCTACACTG TCCTTCATGG GGATTAAAGC TATGGTTATA   3060
          TTAGCACCAA ACTTCTACAA ACCAAGCTCA GGGCCCCAAC CCTAGAAGGG CCCAAATGAG   3120
          AGAATGGTAC TTAGGGATGG AAAACGGGGC CTGGCTAGAG CTTCGGGTGT GTGTGTCTGT   3180
          CTGTGTGTAT GCATACATAT GTGTGTATAT ATGGTTTTGT CAGGTGGTGTA AATTTGCAAA  3240
50        TTGTTTCCTT TATATATGTA TGTATATATA TATATGAAAA TATATATATA TATGAAAAAT   3300
          AAAGCTTAAT TGTCCCAGAA AATCATACAT TGCTTTTTTA TTCTACATGG GTACCACAGG   3360
          AACCTGGGGG CCTGTGAAAC TACAACCAAA AGGCACACAA AACCGTTTCC AGTTGGCAGC   3420
          AGAGATCAGG GGTTACCTCT GCTTCTGAGC AAATGGCTCA AGCTCTACCA GAGCAGACAG   3480
          CTACCCTACT TTTCAGCAGC AAAACGTCCC GTATGACGCA GCACGAAGGG CCTGGCAGGC   3540
55        TGTTAGCAGG AGCTATGTCC CTTCCTATCG TTTCCGTCCA CTT
```

Seq ID NO: 352 Protein sequence
Protein Accession #: NP_006491.1

```
       1         11         21         31         41         51
       |          |          |          |          |          |
       GLPRLVCAFL LAACCCCPRV AGVPGEAEQP APELVEVEVG STALLKCGLS QSQGNLSHVD    60
       WFSVHKEKRT LIFRVRQGQG QSEPGEYEQR LSLQDRGATL ALTQVTPQDE RIFLCQGKRP   120
       RSQEYRIQLR VYKAPEEPNI QVNPLGIPVN SKEPEEVATC VGRNGYPIPQ VIWYKNGRPL   180
       KEEKNRVHIQ SSQTVESSGL YTLQSILKAQ LVKEDKDAQF YCELNYRLPS GNHMKESREV   240
       TVPVFYPTEK VWLEVEPVGM LKEGDRVEIR CLADGNPPPH FSISKQNPST REAEEETTND   300
       NGVLVLEPAR KEHSGRYECQ AWNLDTMISL LSEPQELLVN YVSDVRVSPA APERQEGSSL   360
       TLTCEAESSQ DLEFQWLREE TDQVLERGPV LQLHDLKREA GGGYRCVASV PSIPGLNRTQ   420
       LVKLAIFGPP WMAFKERKVW VKENMVLNLS CEASGHPRPT ISWNVNGTAS EQDQDPQRVL   480
       STLNVLVTPE LLETGVECTA SNDLGKNTSI LFLELVNLTT LTPDSNTTTG LSTSTASPHT   540
       RANSTSTERK LPEPESRGVV IVAVIVCILV LAVLGAVLYF LYKKGKLPCR RSGKQEITLP   600
       PSRKTELVVE VKSDKLPEEM GLLQGSSGDK RAPGDQGEKY IDLRH
```

Seq ID NO: 353 DNA sequence
Nucleic Acid Accession #: NM_003183.3
Coding sequence: 165..2639

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       1         11         21         31         41         51
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       GCTAGGCCGG GCGGATCCCG TCCTCCCCCG ATGTGAGCAG TTTTCCGAAA CCCCGTCAGG   120
       CGAAGGCTGC CCAGAGAGGT GGAGTCGGTA GCGGGGCCGG AACATGAGG CAGTCTCTCC     180
       TATTCCTGAC CAGCGTGGTT CCTTTCGTGC TGGCGCCGCG ACCTCCGGAT GACCCGGGCT   240
       TCGGCCCCCA CCAGAGACTC GAGAAGCTTG ATTCTTTGCT CTCAGACTAC GATATTCTCT   300
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           CTTTATCTAA TATCCAGCAG CATTCGGTAA GAAAAAGAGA TCTACAGACT TCAACACATG    360
           TAGAAACACT ACTAACTTTT TCAGCTTTGA AAAGGCATTT TAAATTATAC CTGACATCAA    420
           GTACTGAACG TTTTTCACAA AATTTCAAGG TCGTGGTGGT GGATGGTAAA AACGAAAGCG    480
   5       AGTACACTGC AAAATGGCAG GACTTCTTCA CTGGACACGT GGTTGGTGAG CCTGACTCTA    540
           GGGTTCTAGC CCACATAAGA GATGATGATG TTATAATCAG AATCAACACA GATGGGGCCG    600
           AATATAACAT AGAGCCACTT TGGAGATTTG TTAATGATAC CAAAGACAAA AGAATGTTAG    660
           TTTATAAATC TGAAGATATC AAGAATGTTT CACGTTTGCA GTCTCCAAAA GTGTGTGGTT    720
           ATTTAAAAGT GGATAATGAA GAGTTGCTCC CAAAAGGGTT AGTAGACAGA GAACCACCTG    780
  10       AAGAGCTTGT TCATCGAGTG AAAAGAAGAG CTGACCCAGA TCCCATGAAG AACACGTGTA    840
           AATTATTGGT GGTAGCAGAT CATCGCTTCT ACAGATACAT GGGCAGAGGG GAAGAGAGTA    900
           CAACTACAAA TTACTTAATA GAGCTAATTG ACAGAGTTGA TGACATCTAT CGGAACACTT    960
           CATGGGATAA TGCAGGTTTT AAAGGCTATG GAATACAGAT AGAGCAGATT CGCATTCTCA   1020
           AGTCTCCACA AGAGGTAAAA CCTGGTGAAA AGCACTACAA CATGGCAAAA AGTTACCCAA   1080
           ATGAAGAAAA GGATGCTTGG GATGTGAAGA TGTTGCTAGA GCAATTAGC TTTGATATAG   1140
  15       CTGAGGAAGC ATCTAAAGTT TGCTTGGCAC ACCTTTTCAC ATACCAAGAT TTTGATATGG   1200
           GAACTCTTGG ATTAGCTTAT GTTGGCTCTC CCAGAGCAAA CAGCCATGGA GGTGTTTGTC   1260
           CAAAGGCTTA TTATAGCCCA GTTGGGAAGA AAAATATCTA TTTGAATAGT GGTTTGACGA   1320
           GCACAAAGAA TTATGGTAAA ACCATCCTTA CAAAGGAAGC TGACCTGGTT ACAACTCATG   1380
           AATTGGGACA TAATTTTGGA GCAGAACATG ATCCGGATGG TCTAGCAGAA TGTGCCCCGA   1440
  20       ATGAGGACCA GGGAGGGAAA TATGTCATGT ATCCCATAGC TGTGAGTGGC GATCACGAGA   1500
           ACAATAAGAT GTTTTCAAAC TGCAGTAAAC AATCAATCTA TAAGACCATT GAAAGTAAGG   1560
           CCCAGGAGTG TTTTCAAGAA CGCAGCAATA AAGTTTGTGG GAACTCGAGG GTGGATGAAG   1620
           GAGAAGAGTG TGATCCTGGC ATCATGTATC TGAACAACGA CACCTGCTGC AACAGCGACT   1680
           GCACGTTGAA GGAAGGTGTC CAGTGCAGTG ACAGGAACAG TCCTTGCTGT AAAAACTGTC   1740
  25       AGTTTGAGAC TGCCCAGAAG AAGTGCCAGG AGGCGATTAA TGCTACTTGC AAAGGCGTGT   1800
           CCTACTGCAC AGGTAATAGC AGTGAGTGCC CGCCTCCAGG AAATGCTGAA AATGACACTG   1860
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           AGCAGCTGGA GTCCTGTGCA TGTAATGAAA CTGACAACTC CTGCAAGGTG TGCTGCAGGG   1980
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           AGTTTTTAGC AGACAACATC GTTGGGTCTG TCCTGGTTTT CTCCTTGATA TTTTTGGATTC   2220
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           TAAGGTGAAA GTGAATCTAC TTATTTTGAG GCTTTCAGGT TTTAGTTTTT AAAATATCTT   2880
           TTGACCTGTG GTGCAAAAGC AGAAAATACA GCTGGATTGG GTTATGAATA TTTACGTTTT   2940
  45       TGTAAATTAA TCTTTTATAT TGATAACAGC ACTGACTAGG GAAATGATCA GTTTTTTTTT   3000
           ATACACTGTA ATGAACCGCT GAATATGAAG CATTTGGCAT TTATTTGTGA GAAAAGTGGA   3060
           ATAGTTTTT TTTTTTTTTT TTTTTTTTGC CTTCAACTAA AAACAAAGGA GATAAATTTA   3120
           GTATACATTG TATCTAAATT GTGGGTCTAT TTCTAGTTAT TACCCAGAGT TTTTATGTAG   3180
           CAGGGAAAAT ATATATCTAA ATTTAGAAAT CATTTGGGTT AATATGGCTC TTCATAATTC   3240
  50       TAAGACTAAT GCTCAGAACC TAACCACTAC CTTACAGTGA GGGCTATACA TGGTAGCCAG   3300
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           TTTTATAAGT ATCTTCATGT ATCCCTGTTA CTGATAGGGA TACATGTCTT AGAAAATTCA   3420
           CTATTGGCTG GGAGTGGTGG CTCATGCCTG TAATCCCAGC ACTTGGAGAG GCTGAGGTTG   3480
           CGCCACTACA CTCCAGCCTG GGTGACAGAG TGAGATCGC CTC
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Seq ID NO: 354 Protein sequence
Protein Accession #: NP_003174.2

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      QTSTHVETLL TFSALKRHFK LYLTSSTERP SQNFKVVVVD GKNESEYTAK WQDFPTGHVV   120
      GEPDSRVLAH IRDDDVIIRI NTDGAEYNIE PLWRFVNDTK DKRMLVYKSE DIKNVSRLQS   180
      PKVCGYLKVD NEELLPKGLV DREPPEELVH RVKRRADPDP MKNTCKLLVV ADHRFYRYMG   240
  65  RGEESTTTNY LIELIDRVDD IYRNTSWDNA GPKGYGIQIE QIRILKSPQE VKPGEKHYNM   300
      AKSYPNEEKD AWDVKMLLEQ PSFDIAEEAS KVCLAHLFTY QDFDMGTLGL AYVGSPRANS   360
      HGGVCPKAYY SPVGKKNIYL NSGLTSTKNY GKTILTKEAD LVTTHELGHN FGAEHDPDGL   420
  70  AECAPNEDQG GKYVMYPIAV SGDHENNKMF SNCSKQSIYK TIESKAQECF QERSNKVCGN   480
      SRVDEGEECD PGIMYLNNDT CCNSDCTLKE GVQCSDRNSP CCKNCQFETA QKKCQEAINA   540
      TCKGVSYCTG NSSECPPPGN AENDTVCLDL GKCKDGKCIP FCEREQQLES CACNETDNSC   600
      KVCCRDLSGR CVPYVDAEQK NLPLRKGKPC TVGFCDMNGK CEKRVQDVIE RFWDPIDQLS   660
      INTFGKFLAD NIVGSVLVFS LIFWIPFSIL VHCVDKKLDK QYESLSLFHP SNVEMLSSMD   720
      SASVRIIKPF PAPQTPGRLQ PAPVIPSAPA APKLDHQRMD TIQEDPSTDS HMDEDGFEKD   780
  75  PPPNSSTAAK SFEDLTDHPV ARSEKAASFK LQRQNRVNSK ETEC
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Seq ID NO: 355 DNA sequence
Nucleic Acid Accession #: NM_021832.1
Coding sequence: 164..2248

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      CTAGGCCGGG CGGATCCCGT CCTCCCCCGA TGTGAGCAGT TTTTCCGAAC CCCGTCAGGC   120
      GAAGGCTGCC CAGAGAGGTG GAGTCGGTAG CGGGGCCGGG AACATGAGGC AGTCTCTCCT   180
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       ATTCCTGACC AGCGTGGTTC CTTTCGTGCT GGCGCCGCGA CCTCCGGATG ACCCGGGCTT   240
       CGGCCCCCAC CAGAGACTCG AGAAGCTTGA TTCTTTGCTC TCAGACTACG ATATTCTCTC   300
       TTTATCTAAT ATCCAGCAGC ATTCGGTAAG AAAAAGAGAT CTACAGACTT CAACACATGT   360
       AGAAACACTA CTAACTTTTT CAGCTTTGAA AAGGCATTTT AAATTATACC TGACATCAAG   420
5      TACTGAACGT TTTTCACAAA ATTTCAAGGT CGTGGTGGTG GATGGTAAAA ACGAAAGCGA   480
       GTACACTGTA AAATGGCAGG ACTTCTTCAC TGGACACGTG GTTGGTGAGC CTGACTCTAG   540
       GGTTCTAGCC CACATAAGAG ATGATGATGT TATAATCAGA ATCAACACAG ATGGGGCCGA   600
       ATATAACATA GAGCCACTTT GGAGATTTGT TAATGATACC AAAGACAAAA GAATGTTAGT   660
       TTATAAATCT GAAGATATCA AGAATGTTTC ACGTTTGCAG TCTCCAAAAG TGTGTGGTTA   720
10     TTTAAAAGTG·GATAATGAAG AGTTGCTCCC AAAAGGGTTA GTAGACAGAG AACCCACCTGA  780
       AGAGCTTGTT CATCGAGTGA AAAGAAGAGC TGACCCAGAT CCCATGAAGA ACACGTGTAA   840
       ATTATTGGTG GTAGCAGATC ATCGCTTCTA CAGATACATG GGCAGAGGGG AAGAGAGTAC   900
       AACTACAAAT TACTTAATAG AGCTAATTGA CAGAGTTGAT GACATCTATC GGAACACTTC   960
       ATGGGATAAT GCAGGTTTTA AAGGCTATGG AATACAGATA GAGCAGATTC GCATTCTCAA   1020
15     GTCTCCACAA GAGGTAAAAC CTGGTGAAAA GCACTACAAC ATGGCAAAAA GTTACCCAAA   1080
       TGAAGAAAAG GATGCTTGGG ATGTGAAGAT GTTGCTAGAG CAATTTAGCT TTGATATAGC   1140
       TGAGGAAGCA TCTAAAGTTT GCTTGGCACA CCTTTTCACA TACCAAGATT TTGATATGGG   1200
       AACTCTTGGA TTAGCTTATG TTGGCTCTCC CAGAGCAAAC AGCCATGGAG GTGTTTGTCC   1260
       AAAGGCTTAT TATAGCCCAG TTGGGAAGAA AAATATCTAT TTGAATAGTG GTTTGACGAG   1320
20     CACAAAGAAT TATGGTAAAA CCATCCTTAC AAAGGAAGCT GACCTGGTTA CAACTCATGA   1380
       ATTGGGACAT AATTTTGGAG CAGAACATGA TCCGGATGGT CTAGCAGAAT GTGCCCCGAA   1440
       TGAGGACCAG GGAGGGAAAT ATGTCATGTA TCCCATAGCT GTGAGTGGCG ATCACGAGAA   1500
       CAATAAGATG TTTTCAAACT GCAGTAAACA ATCAATCTAT AAGACCATTG AAAGTAAGGC   1560
       CCAGGAGTGT TTTCAAGAAC GCAGCAATAA AGTTTGTGGG AACTCGAGGG TGGATGAAGG   1620
25     AGAAGAGTGT GATCCTGGCA TCATGTATCT GAACAACGAC ACCTGCTGCA ACAGCGACTG   1680
       CACGTTGAAG GAAGGTGTCC AGTGCAGTGA CAGGAACAGT CCTTGCTGTA AAAACTGTCA   1740
       GTTTGAGACT GCCCAGAAGA AGTGCCAGGA GGCGATTAAT GCTACTTGCA AAGGCGTGTC   1800
       CTACTGCACA GGTAATAGCA GTGAGTGCCC GCCTCCAGGA AATGCTGAAG ATGACACTGT   1860
       TTGCTTGGAT CTTGGCAAGT GTAAGGATGG GAAATGCATC CCTTTCTGCG AGAGGGAACA   1920
30     GCAGCTGGAG TCCTGTGCAT GTAATGAAAC TGACAACTCC TGCAAGGTGT GCTGCAGGGA   1980
       CCTTTCCGGC CGCTGTGTGC CCTATGTCGA TGCTGAACAA AAGAACTTAT TTTTGAGGAA   2040
       AGGAAAGCCC TGTACAGTAG GATTTTGTGA CATGAATGGC AAAATGTGAGA AACGAGTACA   2100
       GGATGTAATT GAACGATTTT GGGATTTCAT TGACCAGCTG AGCATCAATA CTTTTGGAAA   2160
       GTTTTTAGCA GACAACATCG TTGGGTCTGT CCTGGTTTTC TCCTTGATAT TTTGGATTCC   2220
35     TTTCAGCATT CTTGTCCATT GTGTGTAACG TCGAAATGCT GAGCAGCATG GATTCTGCAT   2280
       CGGTTCGCAT TATCAAACCC TTTCCTGCGC CCCAGACTCC AGGCCGCCTG CAGCCTGCCC   2340
       CTGTGATCCC TTCGGCGCCA GCAGCTCCAA AACTGGACCA CCAGAGAATG GACACCATCC   2400
       AGGAAGACCC CAGCACAGAC TCACATATGG ACGAGGATGG GTTTGAGAAG GACCCCTTCC   2460
       CAAATAGCAG CACAGCTGCC AAGTCATTTG AGGATCTCAC GGACCATCCG GTCACCAGAA   2520
40     GTGAAAAGGC TGCCTCCTTT AAACTGCAGC GTCAGAATCG TGTTGACAGC AAAGAAACAG   2580
       AGTGCTAATT TAGTTCTCAG CTCTTCCTGAC TTAAGTGTGC AAAATATTTT TATAGATTTG  2640
       ACCTACAATC AATCACAGCT TATATTTTGT GAAGACTGGG AAGTGACTTA GCAGATGCTG   2700
       GTCATGTGTT TGAACTTCCT GCAGGTAAAC AGTTCTTGTG TGGTTTGGCC CTTCTCCTTT   2760
       TGAAAAGGTA AGGTGAAGGT GAATCTAGCT TATTTTGAGG CTTTCAGGTT TTAGTTTTTA   2820
45     AAATATCTTT TGACCTGTGG TGCAAAAGCA GAAAATACAG CTGGATTGGG TTATGAGTAT   2880
       TTACGTTTTT GTAAATTAAT CTTTTATATT GATAACAGGC ACTGACTAGG GAAATGATCA   2940
       GTTTTTTTTT ATACACTGTA ATGAACCGCT GAATATGAAG CATTTGGCAT TTATTTGTGA  3000
       GAAAAGTGGA ATAGTTTTTT TTTTTTTTTT TTTTTTTTGC CTTCAACTAA AAACAAAGGA  3060
       GATAAATTTA GTATACATTG TATCTAAATT GTGGGTCTAT TTCTAGTTAT TACCCAGAGT   3120
50     TTTTATGTAG CAGGGAAAAT ATATATCTAA ATTTAGAAAT CATTTGGGTT AATATGGCTC   3180
       TTCATAATTC TAAGACTAAT GCTCAGAACC TAACCACTAC CTTACAGTGA GGGCTATACA   3240
       TGGTAGCCAG TTGAATTTAT GGAATCTACC AACTGTTTAG GGCCCTGATT TGCTGGGCAG   3300
       TTTTTCTGTA TTTTATAAGT ATCTTCATGT ATCCCTGTTA CTGATAGGGA TACATGTCTT   3360
       AGAAAATTCA CTATTGGCTG GGAGTGGTGG CTCATGCCTG TAATCCCAGC ACTTGGGAGG   3420
       3421 GCTGAGGTTG CGCCACTACA CTCCAGCCTG GGTGACAGAG TGAGATCTGC CTC
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Seq ID NO: 356 <u>Protein sequence</u>
Protein Accession #: NP_068604.1

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QTSTHVETLL TFSALKRHFK LYLTSSTERF SQNFKVVVVD GKNESEYTVK WQDFFTGHVV   120
GEPDSRVLAH IRDDDVIIRI NTDGAEYNIE PLWRFVNDTK DKRMLVYKSE DIKNVSRLQS   180
PKVCGYLKVD NEELLPKGLV DREPPEELVH RVKRRADPDP MKNTCKLLVV ADHRFYRYMG   240
RGEESTTTNY LIELIDRVDD IYRNTSWDNA GFKGYGIQIE QIRILKSPQE VKPGEKHYNM   300
AKSYPNEEKD AWDVKMLLEQ FSFDIAEEAS KVCLAHLFTY QDFDMGTLGL AYVGSPRANS   360
HGGVCPKAYY SPVGKKNIYL NSGLTSTKNY GKTILTKEAD LVTTHELGHN FGAEHDPDGL   420
AECAPNEDQG GKYVMYPIAV SGDHENNKMF SNCSKQSIYK TIESKAQECF QERSNKVCGN   480
SRVDEGEECD PGIMYLNNDT CCNSDCTLKE GVQCSDRNSP CCKNCQFETA QKKCQEAINA   540
TCKGVSYCTG NSSECPPPGN AEDDTVCLDL GKCKDGKCIP FCEREQQLES CACNETDNSC   600
KVCCRDLSGR CVPYVDAEQK NLFLRKGKPC TVGFCDMNGK CEKRVQDVIE RFWDPIDQLS   660
INTFGKFLAD NIVGSVLVFS LIFWIPFSIL VHCV
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Seq ID NO: 357 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_004994.1
Coding sequence: 20..2143

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GGGCTGCTGC TTTGCTGCCC CCAGACAGCG CCAGTCCACC CTTGTGCTCT TCCCTGGAGA   120
CCTGAGAACC AATCTCACCG ACAGGCAGCT GGCAGAGGAA TACCTGTACC GCTATGGTTA   180
CACTCGGGTG GCAGAGATGC GTGGAGAGTC GAAATCTCTG GGCATGCGC TGCTGCTTCT   240
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1089

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       CCAGAAGCAA CTGTCCCTGC CCGAGACCGG TGAGCTGGAT AGCGCCACGC TGAAGGCCAT   300
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       CAAGTGGCAC CACCACAACA TCACCTATTG GATCCAAAAC TACTCGGAAG ACTTGCCGCG   420
       GGCGGTGATT GACGACGCCT TTGCCCGCGC CTTCGCACTG TGGAGCGCGG TGACGCCGCT   480
   5   CACCTTCACT CGCGTGTACA GCCGGGACGC AGACATCGTC ATCCAGTTTG GTGTCGCGGA   540
       GCACGGAGAC GGGTATCCCT TCGACGGGAA GGACGGGCTC CTGGCACACG CCTTTCCTCC   600
       TGGCCCCGGC ATTCAGGGAG ACGCCCATTT CGACGATGAC GAGTTGTGGT CCCTGGGCAA   660
       GGGCGTCGTG GTTCCAACTC GGTTTGGAAA CGCAGATGGC GCGGCCTGCC ACTTCCCCTT   720
       CATCTTCGAG GGCCGCTCCT ACTCTGCCTG CACCACCGAC GGTCGCTCCG ACGGCTTGCC   780
  10   CTGGTGCAGT ACCACGGCCA ACTACGACAC CGACGACCGG TTTGGCTTCT GCCCCAGCGA   840
       GAGACTCTAC ACCCGGGACG GCAATGCTGA TGGGAAACCC TGCCAGTTTC CATTCATCTT   900
       CCAAGGCCAA TCCTACTCCG CCTGCACCAC GGACGGTCGC TCCGACGGGT ACCGCTGGTG   960
       CGCCACCACC GCCAACTACG ACCGGGACAA GCTCTTCGGC TTCTGCCCGA CCCGAGCTGA  1020
       CTCGACGGTG ATGGGGGGCA ACTCGGCGGG GGAGCTGTGC GTCTTCCCCT TCACTTTCCT  1080
  15   GGGTAAGGAG TACTCGACCT GTACCAGCGA GGGCCGCGGA GATGGGCGCC TCTGGTGCGC  1140
       TACCACCTCG AACTTTGACA GCGACAAGAA GTGGGGCTTC TGCCCGGACC AAGGATACAG  1200
       TTTGTTCCTC GTGGCGGCGC ATGAGTTCGG CCACGCGCTG GGCTTAGATC ATTCCTCAGT  1260
       GCCGGAGGCG CTCATGTACC CTATGTACCG CTTCACTGAG GGGCCCCCCT TGCATAAGGA  1320
       CGACGTGAAT GGCATCCGGC ACCTCTATGG TCCTCGCCCT GAACCTGAGC ACGGGCCTCC  1380
  20   AACCACCACC ACACCGCAGC CCACGGCTCC CCCGACGGTC TGCCCCACCG GACCCCCCAC  1440
       TGTCCACCCC TCAGAGCGCC CCACAGCTGG CCCCACAGGT CCCCCCTCAG CTGGCCCCAC  1500
       AGGTCCCCCC ACTGCTGGCC CTTCTACGGC CACTACTGTG CCTTTGAGTC CGGTGGACGA  1560
       TGCCTGCAAC GTGAACATCT TCGACGCCAT CGCGGAGATT GGGAACCAGC TGTATTTGTT  1620
       CAAGGATGGG AAGTACTGGC GATTCTCTGA GGGCAGGGGG AGCCGGCCGC AGGGCCCCTT  1680
  25   CCTTATCGCC GACAAGTGGC CCGCGCTGCC CCGCAAGCTG GACTCGGTCT TTGAGGAGCC  1740
       GCTCTCCAAG AAGCTTTTCT TCTTCTCTGG GCGCCAGGTG TGGGTGTACA CAGGCGCGTC  1800
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       CGGGGCCCTC CGGAGTGGCA GGGGGAAGAT GCTGCTGTTC AGCGGGCGGC GCCTCTGGAG  1920
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  30   CCCCGGGGTG CCTTTGGACA CGCACGACGT CTTCCAGTAC CGAGAGAAAG CCTATTTCTG  2040
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       CAAACTGGTA TTCTGTTCTG GAGGAAAGGG AGGAGTGGAG GTGGGCTGGG CCCTCTCTTC · 2280
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Seq ID NO: 358 Protein sequence
Protein Accession #: NP_004985.1

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       RGESKSLGPA LLLLQKQLSL PETGELDSAT LKAMRTPRCG VPDLGRFQTF EGDLKWHHHN   120
       ITYWIQNYSE DLPRAVIDDA FARAFALWSA VTPLTFTRVY SRDADIVIQF GVAEHGDGYP   180
  45   FDGKDGLLAH AFPPGPGIQG DAHFDDDELW SLGKGVVVPT RFGNADGAAC HPPFIFEGRS   240
       YSACTTDGRS DGLPWCSTTA NYDTDDRFGF CPSERLYTRD GNADGKPCQF PFIFQGQSYS   300
       ACTTDGRSDG YRWCATTANY DRDKLFGFCP TRADSTVMGG NSAGELCVFP FTFLGKEYST   360
       CTSEGRGDGR LWCATTSNFD SDKKWGFCPD QGYSLFLVAA HEFGHALGLD HSSVPEALMY   420
  50   PMYRFTEGPP LHKDDVNGIR HLYGPRPEPE PRPPTTTTPQ PTAPPTVCPT GPPTVHPSER   480
       PTAGPTGPPS AGPTGPPTAG PSTATTVPLS PVDDACNVNI FDAIAEIGNQ LYLFKDGKYW   540
       RFSEGRGSRP QGPFLIADKW PALPRKLDSV FEEPLSKKLF FFSGRQWVVY TGASVLGPRR   600
       LDKLGLGADV AQVTGALRSG RGKMLLFSGR RLWRFDVKAQ MVDPRSASEV DRMFPGVPLD   660
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Seq ID NO: 359 DNA sequence
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Coding sequence: 127..5385

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       AAGAGGATGG CAGGGGCCACG CCCCAGCCCA TGGGCCAGGC TGCTCCTGGC AGCCTTGATC   180
       AGCGTCAGCC TCTCTCTGGAC CTTGGCAAAC CGCTGCAAGA AGGCCCCAGT GAAGAGCTGC   240
  65   ACGGAGTGTG TCCGTGTGGA TAAGGACTGC GCCTACTGCA CAGACGAGAT GTTCAGGGAC   300
     · CGGGCTGCA ACACCCAGGC GGAGCTGCTG GCCGCGGGCT GCCAGCGGGA GAGCATCGTG   360
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       AGCCAGATGT CCCCCCAAGG CCTGCGGGTC CGTCTGCGGC CCGGTGAGGA GCGGCATTTT   480
       GAGCTGGAGG TGTTTGAGCC ACTGGAGAGC CCCGTGGACC TGTACATCCT CATGGACTTC   540
  70   TCCAACTCCA TGTCCGATGA TCTGGACAAC CTCAAGAAGA TGGGGCAGAA CCTGGCTCGG   600
       GTCCTGAGCC AGCTCACCAG CGACTACACT ATTGGATTTG GCAAGTTTGT GGACAAAGTC   660
       AGCGTCCCGC AGACGGACAT GAGGCCTGAG AAGCTGAAGG AGCCCTGGCC CAACAGTGAC   720
       CCCCCCTTCT CCTTCAAGAA CGTCATCAGC CTGACAGAAG ATGTGGATGA GTTCCGGAAT   780
       AAACTGCAGG GAGAGCGGAT CTCAGGCAAC CTGGATGCTC CTGAGGGCGG CTTCGATGCC   840
  75   ATCCTGCAGA CAGCTGTGTG CACGAGGGAC ATTGGCTGGC GCCCGGACAC CACCCACCTG   900
       CTGGTCTTCT CCACCGAGTC AGCCTTCCAC TATGAGGCTG ATGGCCCCAA CGTGCTGGCT   960
       GGCATCATGA GCCGCAACGA TGAACGGTGC CACCTGGACA CCACGGGCAC CTACACCCAG  1020
       TACAGGACAC AGGACTACCC GTCGGTGCCC ACCCTGGTGC GCCTGCTCGC CAAGCACAAC  1080
       ATCATCCCCA TCTTTGCTGT CACCAACTAC TCCTATAGCT ACTACAGGAA GCTTCACACC  1140
  80   TATTTCCCTG TCTCCTCACT GGGGGTGCTG CAGGAGGACT CGTCCAACAT CGTGGAGCTG  1200
       CTGGAGGAGG CCTTCAATCG GATCCGCTCC AACTCGGACA TCCGGGCCCT AGACAGCCCC  1260
       CGAGGCCTTC GGACAGAGGT CACCTCCAAG ATGTTCCAGA AGACAGAGGAC TGGGTCCTTT  1320
       CACATCCGGC GGGGGGAAGT GGGTATATAC CAGGTGCAGC TGCGGGCCCT TGAGCACGTG  1380
       GATGGGACGC ACGTGTGCCA GCTGCCGGAG GACCAGAAGG GCAACATCCA TCTGAAACCT  1440
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     TCCTTCTCCG ACGGCCTCAA GATGGACGCG GGCATCATCT GTGATGTGTG CACCTGCGAG   1500
     CTGCAAAAAG AGGTGCGGTC AGCTCGCTGC AGCTTCAACG GAGACTTCGT GTGCGGACAG   1560
     TGTGTGTGCA GCGAGGGCTG GAGTGGCCAG ACCTGCAACT GCTCCACCGG CTCTCTGAGT   1620
     GACATTCAGC CCTGCCTGCG GGAGGGCGAG GACAAGCCGT GCTCCGGCCG TGGGGAGTGC   1680
     CAGTGCGGGC ACTGTGTGTG CTACGGCGAA GGCCGCTACG AGGGTCAGTT CTGCGAGTAT   1740
     GACAACTTCC AGTGTCCCCG CACTTCCGGG TTCCTCTGCA ATGCCGGAGG ACGCTGCTCC   1800
     ATGGGCCAGT GTGTGTGTGA GCCTGGTTGG ACAGGCCCAA GCTGTGACTG TCCCCTCAGC   1860
     AATGCCACCT GCATCGACAG CAATGGGGGC ATCTGTAATG GACGTGGCCA CTGTGAGTGT   1920
     GGCCGCTGCC ACTGCCAACTA GCAGTCGCTC TACACGGACA CCATCTGCGA GATCAACTAC   1980
     TCGGCGATCC ACCCGGGCCT CTGCGAGGAC CTACGCTCCT GCGTGCAGTG CCAGGCGTGG   2040
     GGCACCGGCG AGAAGAAGGG GCGCACGTGT GAGGAATGCA ACTTCAAGGT CAAGATGGTG   2100
     GACGAGCTTA AGAGAGCCGA GGAGGTGGTG GTGCGCTGCT CCTTCCGGGA CGAGGATGAC   2160
     GACTGCACCT ACAGCTACAC CATGGAAGGT GACGGCGCCC CTGGGCCCAA CAGCACTGTC   2220
     CTGGTGCACA AGAAGAAGGA CTGCCCTCCG GGCTCCTTCT GGTGGCTCAT CCCCCTGCTC   2280
     CTCCTCCTCC TGCCGCTCCT GGCCCTGCTA CTGCTGCTAT GCTGGAAGTA CTGTGCCTGC   2340
     TGCAAGGCCT GCCTGGCACT TCTCCCGTGC TGCAACCGAG GTCACATGGT GGGCTTTAAG   2400
     GAAGACCACT ACATGCTGCG GGAGAACCTG ATGGCCTCTG ACCACTTGGA CACGCCCATG   2460
     CTGCGCAGCG GGAACCTCAA GGGCCGTGAC GTGGTCCGCT GGAAGGTCAC CAACAACATG   2520
     CAGCGGCCTG GCTTTGCCAC TCATGCCGCC AGCATCAACC CACCAGAGCT GGTGCCCTAC   2580
     GGGCTGTCCT TGCGCCTGGC CCGCCTTTGC ACCGAGAACC TGCTGAAGCC TGACACTCGG   2640
     GAGTGCGCCC AGCTGCGCCA GGAGGTGGAG GAGAACCTGA ACGAGGTCTA CAGGCAGATC   2700
     TCCGGTGTAC ACAAGCTCCA GCAGACCAAG TTCCGGCAGC AGCCCAATGC CGGGAAAAAG   2760
     CAAGACCACA CCATTGTGGA CACAGTGCTG ATGGCGCCCC GCTCGGCCAA GCCGGCCCTG   2820
     CTGAAGCTTA CAGAGAAGCA GGTGGAACAG AGGGCCTTCC ACGACCTCAA GGTGGCCCCC   2880
     GGCTACTACA CCCTCACTGC AGACCAGGAC GCCCGGGGCA TGGTGGAGTT CCAGGAGGGC   2940
     GTGGAGCTGG TGGACGTACG GGTGCCCCTC TTTATCCGGC CTGAGGATGA CGACGAGAAG   3000
     CAGCTGCTGG TGGAGGCCAT CGACGTGCCC GCAGGCACTG CCACCCTCGG CCGCCGCCTG   3060
     GTAAACATCA CCATCATCAA GGAGCAAGCC AGAGACGTGG TGTCCTTTGA GCAGCCTGCG   3120
     TTCTCGGTCA GCCGCGGGGA CCAGGTGGCC CGCATCCCTG TCATCCGGCG TGTCCTGGAC   3180
     GGCGGGAAGT CCCAGGTCTC CTACCGCACA CAGGATGGCA CCGCGCAGGG CAACCGGGAC   3240
     TACATCCCCG TGGAGGGTGA GCTGCTGTTC CAGCCTGGGG AGGCCTGGAA AGAGCTGCAG   3300
     GTGAAGCTCC TGGAGCTGCA AGAAGTTGAC TCCCTCCTGC GGGGGCCGCCA GGTCCGCCGT   3360
     TTCCACGTCC AGCTCAGCAA CCCTAAGTTT GGGGGCCCACC TGGGCCAGCC CCACTCCACC   3420
     ACCATCATCA TCAGGGACCC AGATGAACTG GACCGGAGCT TCACGAGTCA GATGTTGTCA   3480
     TCACAGCCAC CCCCTCACGG CGACCTGGGC GCCCCGCCAGA ACCCCAATGC TAAGGCCGCT   3540
     GGGTCCAGGA AGATCCATTT CAACTGGCTG CCCCCCTTCTG GCAAGCCAAT GGGGTACAGG   3600
     GTAAAGTACT GGATTCAGGG TGACTCCGAA TCCGAAGCCC ACCTGCTCGA CAGCCAAGGTG   3660
     CCCTCAGTGG AGCTCACCAA CCTGTACCCG TATTGCGACT ATGAGATGAA GGTGTGCGCC   3720
     TACGGGGCTC AGGGCGGAGG ACCCCTACAGC TCCCTGGTGT CCTGCCGCAC CCACCAGGAA   3780
     GTGCCCAGCG AGCCAGGGCG TCTGGCCTTC AATGTCGTCT CCTCCACGGT GACCCAGCTG   3840
     AGCTGGGCTG AGCCGGCTGA GACCAACGGT GAGATCACAG CCTACGAGGT CTGCTATGGC   3900
     CTGGTCAACG ATGACAACCG ACCTATTGGG CCCATGAAGA AAGTGCTGGT TGACAACCCT   3960
     AAGAACCGGA TGCTGCTTAT TGAGAACCTT CGGGAGTCCC AGCCCTACCG CTACACGGTG   4020
     AAGGCGCGCA ACGGGGCCGG CTGGGGGCCT GAGCGGGAGG CCATCATCAA CCTGGCCACC   4080
     CAGCCCAAGA GGCCCATGTC CATCCCCCATC ATCCCTGACA TCCCTATCGT GGACGCCCAG   4140
     AGCGGGGAGG ACTACGACAG CTTCCTTATG TACAGCGATG ACGTTCTACG CTCTCCATCG   4200
     GGCAGCCAGA GGCCCAGCGT CTCCGATGAC ACTGAGCACC TGGTGAATGG CCGGATGGAC   4260
     TTTGCCTTCC CGGGCAGCAC CAACTCCCTG CACAGGATGA CCACGACCAG TGCTGCTGCC   4320
     TATGGCACCC ACCTGAGCCC ACACGTGCCC CACCGCGTGC TAAGCACATC CTCCACCCTC   4380
     ACACGGGACT ACAACTCACT GACCCGCTCA GAACACTCAC ACTCGACCAC ACTGCCGAGG   4440
     GACTACTCCA CCCTCACCTC CGTCTCCTCC CACGACTCTC GCCTGACTGC TGGGTGTGGA   4500
     GACACGCCCA CCCGCCTGGT GTTCTCTGCC CTGGGGCCCA CATCTCTCAG AGTGAGCTGG   4560
     CAGGAGCCGC GGTGCGAGCG GCCGCTGCAG GGCTACAGTG TGGAGTACCA GCTGCTGAAC   4620
     GGCGGTGAGC TGCATCGGCT CAACATCCCC AACCCTGCCC AGACCTCGGT GGTGGTGGAA   4680
     GACCTCCTGC CCAACCACTC CTACGTGTTC CGCGTGCGGG CCCAGAGCCA GGAAGGCTGG   4740
     GGCCGAGAGC GTGAGGGTGT CATCACCATT GAATCCCAGG TGCACCGCA GAGCCCACTG   4800
     TGTCCCCTGC CAGGCTCCGC CTTCACTTTG AGCACTCCCA GTGCCCCAGG CCCGCTGGTG   4860
     TTCACTGCCC TGACCCCAGA CTCGCTGCAG CTGAGCTGGG AGCGGCCACG GAGGCCCAAT   4920
     GGGGATATCG TCGGCTACCT GGTGACCTGT GAGATGGCCC AAGGAGGAGG GCCAGCCACC   4980
     GCATTCGGGG TGGATGGAGA CAGCCCCGAG AGCCGGCTGA CCGTGCCGGG CCTCAGCGAG   5040
     AACGTGCCCT ACAAGTTCAA GGTGCAGGCC AGGACCACTG AGGGCTTCGG GCCAGAGCGC   5100
     GAGGGCATCA TCACCATAGA GTCCCAGGAT GGAGGACCCT TCCCGCAGCT GGGGCAGCCGT   5160
     GCCGGGCTCT TCCAGCACCC GCTGCAAAGC GAGTACAGCA GCATCACCAC CACCCACACC   5220
     AGCGCCACCG AGCCCTTCCT AGTGGATGGG CCGACCCTGG GGGCCCAGCA CCTGGAGGCA   5280
     GGCGGCTCCC TCACCCGGCA TGTGACCCAG GAGTTTGTGA GCCGGACACT GACCACCAGC   5340
     GGAACCCTTA GCACCCACAT GGACCAACAG TTCTTCCAAA CTTGACCGCA CCCTGCCCCA   5400
     CCCCCGCCAT GTCCCACTAG GCGTCCTCCC GACTCCTCTC CCGGAGCCTC CTCAGCTACT   5460
     CCATCCTTGC ACCCCTGGGG GCCCAGCCCA CCCGCATGCA CAGAGCAGGG GCTAGGTGTC   5520
     TCCTGGGAGG CATGAAGGGG GCAAGGTCCG TCCTCTGTGG GCCCAAACCT ATTTGTAACC   5580
     AAAGAGCTGG GAGCAGCACA AGGACCCAGC CTTTGTTCTG CACTTAATAA ATGGTTTTGC   5640
     TACTG
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Seq ID NO: 360 Protein sequence
Protein Accession #: NP_000204.1

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     1          11         21         31         41         51
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     MAGPRPSPWA RLLLAALISV SLSGTLANRC KKAPVKSCTE CVRVDKDCAY CTDEMFRDRR   60
     CNTQAELLAA GCQRESIVVM ESSFQITEET QIDTTLRRSQ MSPQGLRVRL RPGEERHFEL   120
     EVFEPLESPV DLYILMDFSN SMSDDLDNLK KMGQNLARVL SQLTSDYTIG FGKFVDKVSV   180
     PQTDMRPEKL KEPWPNSDPP FSFKNVISLT EDVDEFRNKL QGERISGNLD APEGGFDAIL   240
     QTAVCTRDIG WRPDSTHLLV FSTESAFHYE ADGANVLAGI MSRNDERCHL DTTGTYTQYR   300
     TQDYPSVPTL VRLLAKHNII PIFAVTNYSY SYYEKLHTYF PVSSLGVLQE DSSNIVELLE   360
     EAFNRIRSNL DIRALDSPRG LRTEVTSKMF QKTRTGSFHI RRGEVGIYQV QLRALEHVDG   420
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        THVCQLPEDQ KGNIHLKPSF SDGLKMDAGI ICDVCTCELQ KEVRSARCSF NGDFVCGQCV   480
        CSEGWSGQTC NCSTGSLSDI QPCLREGEDK PCSGRGECQC GHCVCYGEGR YEGQFCEYDN   540
        FQCPRTSGFL CNDRGRCSMG QCVCEPGWTG PSCDCPLSNA TCIDSNGGIC NGRGHCECGR    600
        CHCHQQSLYT DTICEINYSA IHPGLCEDLR SCVQCQAWGT GEKKGRTCEE CNFKVKMVDE    660
  5     LKRAEEVVVR CSFRDEDDDC TYSYTMEGDG APGPNSTVLV HKKKDCPPGS FWWLIPLLLL    720
        LLPLLALLLL LCWKYCACCK ACLALLPCCN RGHMVGFKED HYMLRENLMA SDHLDTPMLR    780
        SGNLKGRDVV RWKVTNNMQR PGFATHAASI NPTELVPYGL SLRLARLCTE NLLKPDTREC    840
        AQLRQEVEEN LNEVYRQISG VHKLQQTKFR QQPNAGKKQD HTIVDTVLMA PRSAKPALLK    900
 10     LTEKQVEQRA FHDLKVAPGY YTLTADQDAR GMVEFQEGVE LVDVRVPLFI RPEDDDEKQL    960
        LVEAIDVPAG TATLGRRLVN ITIIKEQARD VVSFEQPEFS VSRGDQVARI PVIRRVLDGG   1020
        KSQVSYRTQD GTAQGNRDYI PVEGELLFQP GEAWKELQVK LLELQEVDSL LRGRQVRRFH   1080
        VQLSNPKFGA HLGQPHSTTI IIRDPDELDR SFTSQMLSSQ PPPHGDLGAP QNPNAKAAGS   1140
 15     RKIHFNWLPP SGKPMGYRVK YWIQGDSESE AHLLDSKVPS VELTNLYPYC DYEMKVCAYG   1200
        AQGEGPYSSL VSCRTHQEVP SEPGRLAFNV VSSTVTQLSW AEPAETNGEI TAYEVCYGLV   1260
        NDDNRPIGPM KKVLVDNPKN RMLLIENLRE SQPYRYTVKA RNGAGWGPER EAIINLATQP   1320
        KRPMSIPIIP DIPIVDAQSG EDYDSFLMYS DDVLRSPSGS QRPSVSDDTE HLVNGRMDFA   1380
        FPGSTNSLHR MTTTSAAAYG THLSPHVPHR VLSTSSTLTR DYNSLTRSEH SHSTTLPRDY   1440
 20     STLTSVSSHD SRLTAGVPDT PTRLVFSALG PTSLRVSWQE PRCERPLQGY SVEYQLLNGG   1500
        ELHRLNIPNP AQTSVVVEDL LPNHSYVFRV RAQSQEGWGR EREGVITIES QVHPQSPLCP   1560
        LPGSAFTLST PSAPGPLVFT ALSPDSLQLS WERPRRPNGD IVGYLVTCEM AQGGGPATAF   1620
        RVDGDSPESR LTVPGLSENV PYKFKVQART TEGFGPEREG IITIESQDGG PFPQLGSRAG   1680
        LFQHPLQSEY SSITTTHTSA TEPFLVDGPT LGAQHLEAGG SLTRHVTQEF VSRTLTTSGT   1740
        LSTHMDQQFF QT
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Seq ID NO: 361 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_013332.1
Coding sequence: 1..63

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        1          11         21         31         41         51
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        GCACGAGGGC GCTTTTGTCT CCGGTGAGTT TTGTGGCGGG AAGCTTCTGC GCTGGTGCTT    60
        AGTAACCGAC TTTCCTCCGG ACTCCTGCAC GACCTGCTCC TACAGCCGGC GATCCACTCC   120
        CGGCTGTTCC CCCGGAGGGT CCAGAGGCCT TTCAGAAGGA GAAGGCAGCT CTGTTTCTCT   180
        GCAGAGGAGT AGGGTCCTTT CAGCCATGAA GCATGTGTTG AACCTCTACC TGTTAGGTGT   240
        GGTACTGACC CTACTCTCCA TCTTCGTTAG AGTGATGGAG TCCCTAGAAG GCTTACTAGA   300
        GAGCCCATCG CCTGGGACCT CCTGGACCAC CAGAAGCCAA CTAGCCAACA CAGAGCCCAC   360
        CAAGGGCCTT CCAGACCATC CATCCAGAAG CATGTGATAA GACCTCCTTC CATACTGGCC   420
        ATATTTTGGA ACACTGACCT AGACATGTCC AGATGGGAGT CCCATTCCTA GCAGACAAGC   480
        TGAGCACCGT TGTAACCAGA GAACTATTAC TAGGCCTTGA AGAACCTGTC TAACTGGATG   540
        CTCATTGCCT GGGCAAGGCC TGTTTAGGCC GGTTGCGGTG GCTCATGCCT GTAATCCTAG   600
        CACTTTGGGA GGCTGAGGTG GGTGGATCAC CTGAGGTCAG GAGTTCGAGA CCAGCCTCGC   660
        CAACATGGCG AAACCCCATC TCTACTAAAA ATACAAAAGT TAGCTGGGTG TGGTGGCAGA   720
        GGCCTGTAAT CCCAGTTCCT TGGGAGGCTG AGGCGGGAGA ATTGCTTGAA CCCGGGGACG   780
        GAGGTTGCAG TGAACCGAGA TCGCACTGCT GTACCCAGCC TGGGCCACAG TGCAAGACTC   840
        CATCTCAAAA AAAAAAAGAA AAGAAAAAGC CTGTTTAATG CACAGGTGTG AGTGGATTGC   900
        TTATGGCTAT GAGATAGGTT GATCTCGCCC TTACCCCGGG GTCTGGTGTA TGCTGTGCTT   960
        TCCTCAGCAG TATGGCTCTG ACATCTCTTA GATGTCCCAA CTTCAGCTGT TGGGAGATGG  1020
        TGATATTTTC AACCCTACTT CCTAAACATC TGTCTGGGGT TCCTTTAGTC TTGAATGTCT  1080
        TATGCTCAAT TATTTGGTGT TGAGCCTCTC TTCCACAAGA GCTCCTCCAT GTTTGGATAG  1140
        CAGTTGAAGA GGTTGTGTGG GTGGGCTGTT GGGAGTGAGG ATGGAGTGTT CAGTGCCCAT  1200
        TTCTCATTTT ACATTTTAAA GTCGTTCCTC CAACATTGTG TGTATTGGTC TGAAGGGGGT  1260
        GGTGGGATGC CAAAGCCTGC TCAAGTTATG GACATTGTGG CCACCATGTG GCTTAAATGA  1320
        TTTTTTCTAA CTAATAAAGT GGAATATATA TTTCAAAAAA AAAAAAAAAA AA
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Seq ID NO: 362 <u>Protein sequence</u>
Protein Accession #: NP_037464.1

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        1          11         21         31         41         51
        |          |          |          |          |          |
        MKHVLNLYLL GVVLTLLSIF VRVMESLEGL LESPSPGTSW TTRSQLANTE PTKGLPDHPS    60
        RSM
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Seq ID NO: 363 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_023915.1
Coding sequence: 250..1326

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        1          11         21         31         41         51
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        GGCACGAGGG TTTCGTTTTC ATGCTTTACC AGAAAATCCA CTTCCCTGCC GACCTTAGTT    60
        TCAAAGCTTA TTCTTAATTA GAGACAAGAA ACCTGTTTCA ACTTGAAGAC ACCGTATGAG   120
        GTGAATGGAC AGCCAGCCAC CACAATGAAA GAAATCAAAC CAGGAATAAC CTATGCTGAA   180
        CCCACGCCTC AATCGTCCCC AAGTGTTTCC TGACACGCAT CTTTGCTTAC AGTGCATCAC   240
        AACTGAAGAA TGGGGTTCAA CTTGACGCTT GCAAAATTAC CAAATAACGA GCTGCACGGC   300
        CAAGAGAGTC ACAATTCAGG CAACAGGAGC GACGGGCCAG GAAAGAACAC CACCCTTCAC   360
        AATGAATTTG ACACAATTGT CTTGCCGGTG CTTTATCTCA TTATATTTGT GGCAAGCATC   420
        TTGCTGAATG GTTTAGCAGT GTGGATCTTC TTCCACATTA GAAGTAAAAC CAGCTTCATA   480
        TTCTATCTCA AAAACATAGT GGTTGCAGAC CTCATAATGA CGCTGACATT TCCATTTCGA   540
        ATAGTCCATG ATGCAGGATT TGGACCTTGG TACTTCAAGT TTATTCTCTG CAGATACACT   600
        TCAGTTTTGT TTTATGCAAA CATGTATACT TCCATCGTGT TCCTTGGGCT GATAAGCATT   660
        GATCGCTATC TGAAGGTGGT CAAGCCATTT GGGGACTCTC GGATGTACAG CATAACCTTC   720
        ACGAAGGTTT TATCTGTTTG TGTTTGGGTG ATCATGGCTG TTTTGTCTTT GCCAAACATC   780
        ATCCTGACAA ATGTCAGCCA AACAGAGGAC AAATATCCATG ACTGCTCAAA ACTTAAAAGT   840
        CCTTTGGGGG TCAAATGGCA TACGGCAGTC ACCTATGTGA ACAGCTGCTT GTTTGTGGCC   900
        GTGCTGGTGA TTCTGATCGG ATGTTACATA GCCATATCCA GGTACATCCA CAAATCCAGC   960
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AGGCAATTCA TAAGTCAGTC AAGCCGAAAG CGAAAACATA ACCAGAGCAT CAGGGTTGTT  1020
GTGGCTGTGT TTTTTACCTG CTTTCTACCA TATCACTTGT GCAGAATTCC TTTTACTTTT  1080
AGTCACTTAG ACAGGCTTTT AGATGAATCT GCACAAAAAA TCCTATATTA CTGCAAAGAA  1140
ATTACACTTT TCTTGTCTGC GTGTAATGTT TGCCTGGATC CAATAATTTA CTTTTTCATG  1200
TGTAGGTCAT TTTCAAGAAG GCTGTTCAAA AAATCAAATA TCAGAACCAG GAGTGAAAGC  1260
ATCAGATCAC TGCAAAGTGT GAGAAGATCG GAAGTTCGCA TATATTATGA TTACACTGAT  1320
GTGTAGGCCT TTTATTGTTT GTTGGAATCG ATATGTACAA AGTGTAAATA AATGTTTCTT  1380
TTCATTATCC TTAAAAAAAA AA
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Seq ID NO: 364 Protein sequence
Protein Accession #: NP_076404

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1          11         21         31         41         51
|          |          |          |          |          |
MGFNLTLAKL PNNELHGQES HNSGNRSDGP GKNTTLHNEF DTIVLPVLYL IIFVASILLN   60
GLAVWIFFHI RNKTSFIFYL KNIVVADLIM TLTFPFRIVH DAGFGPWYFK FILCRYTSVL  120
FYANMYTSIV FLGLISIDRY LKVVKPFGDS RMYSITFTKV LSVCVWVIMA VLSLPNIILT  180
NGQPTEDNIH DCSKLKSPLG VKWHTAVTYV NSCLFVAVLV ILIGCYIAIS RYIHKSSRQF  240
ISQSSRKRKH NQSIRVVVAV FFTCFLPYHL CRIPFTFSHL DRLLDESAQK ILYYCKEITL  300
FLSACNVCLD PIIYFFMCRS FSRRLFKKSN IRTRSESIRS LQSVRRSEVR IYYDYTDV
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Seq ID NO: 365 DNA sequence
Nucleic Acid Accession #: NM_005365.1
Coding sequence: 1..948

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1          11         21         31         41         51
|          |          |          |          |          |
ATGTCTCTCG AGCAGAGGAG TCCGCACTGC AAGCCTGATG AAGACCTTGA AGCCCAAGGA   60
GAGGACTTGG GCCTGATGGG TGCACAGGAA CCCACAGGCG AGGAGGAGGA GACTACCTCC  120
TCCTCTGACA GCAAGGAGGA GGAGGTGTCT GCTGCTGGGT CATCAAGTCC TCCCCAGAGT  180
CCTCAGGGAG GCGCTTCCTC CTCCATTTCC GTCTACTACA CTTTATGGAG CCAATTCGAT  240
GAGGGGCTCCA GCAGTCAAGA AGAGGAAGAG CCAAGCTCCT CGGTCGACCC AGCTCAGCTG  300
GAGTTCATGT TCCAAGAAGC ACTGAAATTG AAGGTGGCTG AGTTGGTTCA TTTCCTGCTC  360
CACAAATATC GAGTCAAGGA GCCGGTCACA AAGGCAGAAA TGCTGGAGAG CGTCATCAAA  420
AATTACAAGC GCTACTTTCC TGTGATCTTC GGCAAAGCCT CCGAGTTCAT GCAGGTGATC  480
TTTGGCACTG ATGTGAAGGA GGTGGACCCC GCCGGCCACT CCTACATCCT TGTCACTGCT  540
CTTGGCCTCT CGTGCGATAG CATGCTGGGT GATGGTCATA GCATGCCCAA GGCCGCCCTC  600
CTGATCATTG TCCTGGGTGT GATCCTAACC AAAGACAACT GCGCCCCTGA AGAGGTTATC  660
TGGGAAGCGT TGAGTGTGAT GGGGGTGTAT GTTGGGAAGG AGCACATGTT CTACGGGGAG  720
CCCAGGAAGC TGCTCACCCA AGATTGGGTG CAGGAAAACT ACCTGGAGTA CCGGCAGGTG  780
CCCGGCAGTG ATCCTGCGCA CTACGAGTTC CTGTGGGGTT CCAAGGCCCA CGCTGAAACC  840
AGCTATGAGA AGGTCATAAA TTATTTGGTC ATGCTCAATG CAAGAGAGCC CATCTGCTAC  900
CCATCCCTTT ATGAAGAGGT TTTGGGAGAG GAGCAAGAGG GAGTCTGA
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Seq ID NO: 366 Protein sequence
Protein Accession #: NP_005356.1

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1          11         21         31         41         51
|          |          |          |          |          |
MSLEQRSPHC KPDEDLEAQG EDLGLMGAQE PTGEEEETTS SSDSKEEEVS AAGSSSPPQS   60
PQGGASSSIS VYYTLWSQFD EGSSSQEEEE PSSSVDPAQL EFMFQEALKL KVAELVHPLL  120
HKYRVKEPVT KAEMLESVIK NYKRYFPVIF GKASEFMQVI FGTDVKEVDP AGHSYILVTA  180
LGLSCDSMLG DGHSMPKAAL LIIVLGVILT KDNCAPEEVI WEALSVMGVY VGKEHMFYGE  240
PRKLLTQDWV QENYLEYRQV PGSDPAHYEF LWGSKAHAET SYEKVINYLV MLNAREPICY  300
PSLYEEVLGE EQEGV
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Seq ID NO: 367 DNA sequence
Nucleic Acid Accession #: NM_014400
Coding sequence: 86..1126

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1          11         21         31         41         51
|          |          |          |          |          |
GGTTACTCAT CCTGGGCTCA GGTAAGAGGG CCCGAGCTCG GAGGCGGCAC ACCCAGGGGG   60
GACGCCAAGG GAGCAGGACG GAGCCATGGA CCCCGCCAGG AAAGCAGGTG CCCAGGCCAT  120
GATCTGGACT GCAGGCTGGC TGCTGCTGCT GCTGCTTCGC GGAGGAGCGC AGGCCCTGGA  180
GTGCTACAGC TGCGTGCAGA AAGCAGATGA CGGATGCTCC CCGACAACAA TGAAGACAGT  240
GAAGTGCGCG CCGGGCGTGG ACGTCTGCAC CGAGGCCGTG GGGGCGGTGG AGACCATCCA  300
CGGACAATTC TCGCTGGCAG TGCSGGGTTG CGGTTCGGGA CTCCCCGGCA AGAATGACCG  360
CGGCCTGGAT CTTCACGGGG TTCTGGCGTT CATCCAGCTG CAGCAATGCG CTCAGGATCG  420
CTGCAACGCC AAGCTCAACC TCACCTCGCG GGCGCTCGAC CCGGCAGGTA ATGAGAGTGC  480
ATACCGCCC AACGGCGTGG AGTGCTACAG CTGTGTGGGC CTGAGCCGGG AGGCGTGCCA  540
GGGTACATCG CCGCCGGTCG TGAGCTGCTA CAACGCCAGC GATCATGTCT ACAAGGGCTG  600
CTTCGACGGC AACGTCACCT TGACACGGCAGC TAATGTGACT GTGTCCTTGC CTGTCCGGGG  660
CTGTGTCCAG GATGAATTCT GCACTCGGGA TGGAGTAACA GGCCCAGGGT TCACGCTCAG  720
TGGCTCCTGT TGCCAGGGGT CCCGCTGTAA CTCTGACCTC CGCAACAAGA CCTACTTCTC  780
CCCTCGAATC CCACCCCTTG TCCGGCTGCC CCTCCCAGAG CCCACGACTG TGGCCTCAAC  840
CACATCTGTC ACCACTTCTA CCTCGGCCCC AGTGAGACCC ACATCCACCA CCAAACCCAT  900
GCCAGCGCCA ACCAGTCAGA CTCCGAGACA GGGAGTAGAA CACGAGGCCT CCCGGGATGA  960
GGAGCCCAGG TTGACTGGAG GCGCCGCTGG CCACCAGGAC CGCAGCAATT CAGGGCAGTA 1020
TCCTGCAAAA GGGGGGGCCCC AGCAGCCCCA TAATAAAGGC TGTGTGGCTC CCACAGCTGG 1080
ATTGGCAGCC CTTCTGTTGG CCGTGGCTGC TGGTGTCCTA CTGTGAGCTT CTCCACCTGG 1140
AAATTTCCCT CTCACCTACT TCTCTGGCCC TGGGTACCCC TCTTCTCATC ACTTCCTGTT 1200
CCCACCACTG GACTGGGCTG GCCCAGCCCC TGTTTTTCCA ACATTCCCCA GTATCCCCAG 1260
CTTCTGCTGC GCTGGTTTGC GGCTTTGGGA AATAAAATAC CGTTGTATAT ATTCTGGCAG 1320
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GGGTGTTCTA GCTTTTTGAG GACAGCTCCT GTATCCTTCT CATCCTTGTC TCTCCGCTTG   1380
TCCTCTTGTG ATGTTAGGAC AGAGTGAGAG AAGTCAGCTG TCACGGGGAA GGTGAGAGAG   1440
AGGATGCTAA GCTTCCTACT CACTTTCTCC TAGCCAGCCT GGACTTTGGA GCGTGGGGTG   1500
GGTGGGACAA TGGCTCCCCA CTCTAAGCAC TGCCTCCCCT ACTCCCCGCA TCTTTGGGGA   1560
ATCGGTTCCC CATATGTCTT CCTTACTAGA CTGTGAGCTC CTCGAGGGCA GGGACCGTGC   1620
CTTATGTCTG TGTGTGATCA GTTTCTGGCA CATAAATGCC TCAATAAAGA TTTAATTACT   1680
TTGTATAGTG AAAAAAAA
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Seq ID NO: 368 Protein sequence
Protein Accession #: NP_055215

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MDPARKAGAQ AMIWTAGWLL LLLLRGGAQA LECYSCVQKA DDGCSPNKMK TVKCAPGVDV   60
CTEAVGAVET IHGQFSLAVX GCGSGLPGKN DRGLDLHGLL AFIQLQQCAQ DRCNAKLNLT   120
SRALDPAGNE SAYPPNGVEC YSCVGLSREA CQGTSPPVVS CYNASDHVYK GCFDGNVTLT   180
AANVTVSLPV RGCVQDEFCT RDGVTGPGFT LSGSCCQGSR CNSDLRNKTY FSPRIPPLVR   240
LPPPEPTTVA STTSVTTSTS APVRPTSTTK PMPAPTSQTP RQGVEHEASR DEEPRLTGGA   300
AGHQDRSNSG QYPAKGGPQQ PHNKGCVAPT AGLAALLLAV AAGVLL
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Seq ID NO: 369 DNA sequence
Nucleic Acid Accession #: NM_005329.1
Coding sequence: 1..1662

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Seq ID NO: 370 Protein sequence
Protein Accession #: NP_005320.1

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1095

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    Nucleic Acid Accession #: built from NM_002851
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Seq ID NO: 378 Protein sequence:
Protein Accession #: EOS sequence

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Seq ID NO: 379 DNA sequence
Nucleic Acid Accession #: EOS sequence
Coding sequence: 148-4632

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Protein Accession #: EOS sequence

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        TCCTGGTTAT TATGGCCCTT TTCATGCTGA ATGTAGGCAG CACCGCCTTC AGCACCTGGT  2760
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GCACGCTGCG AGCTTCCTCC CGGCTGCATG ACGAGCTTTT CCGAAGGATC CTTCGAAGCC  3000
CTATGAAGTT TTTTGACACG ACCCCCACAG GGAGGATTCT CAACAGGTTT TCCAAAGACA  3060
TGGATGAAGT TGACGTGCGG CTGCCGTTCC AGGCCGAGAT GTTCATCCAG AACGTTATCC  3120
TGGTGTTCTT CTGTGTGGGA ATGATCGCAG GAGTCTTCCC GTGGTTCCTT GTGGCAGTGG  3180
GGCCCCTTGT CATCCTCTTT TCAGTCCTGC ACATTGTCTC CAGGGTCCTG ATTCGGGAGC  3240
TGAAGCGTCT GGACAATATC ACGCAGTCAC CTTTCCTCTC CCACATCACG TCCAGCATAC  3300
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AGCTGCTGGA TGACAACCAA GCTCCTTTTT TTTTGTTTAC GTGTGCGATG CGGTGGCTGG  3420
CTGTGCGGGCT GGACCTCATC AGCATCGCCC TCATCACCAC CACGGGGCTG ATGATCGTTC  3480
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CTGTCCTGGT GTCACTTACT GTTTCTGTCA GGAGAGCAGC GGGGCGAAGC CCAGGCCCCT  5160
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TCCCACTGCC TCAGGTTCCT ATGGCTGGCC ACTGCACAGA GCTCTCCAGC TCCAAGACCT  5340
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ACCTCAGGTT GCTGGTTGCT GTGTGGTTTG GTGTGTTCCC GCAAACCCCC TTTGTGCTGT  5640
GGGGCTGGTA GCTCAGGTGG GCGTGGTCAC TGCTGTCATC AGTTGAATGG TCAGCGTTGC  5700
ATGTCGTGAC CAACTAGACA TTCTGTCGCC TTAGCATGTT TGCTAACAC CTTGTGGAAG  5760
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AAAAAAAAAA AAAAAAAA
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Seq ID NO: 384 <u>Protein sequence</u>
Protein Accession #: NP_005679.1

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VAHKKGELSM EDVWSLSKHE SSDVNCRRLE RLWQBEELNEV GPDAASLRRV VWIFCRTRLI  180
LSIVCLMITQ LAGFSGPAFM VKHLLEYTQA TESNLQYSLL LVLGLLLTEI VRSWSLALTW  240
ALNYRTGVRL RGAILTMAFK KILKLKNIKE KSLGELINIC SNDGQRMFEA AAVGSLLAGG  300
PVVAILGMIY NVIILGPTGF LGSAVFILFY PAMMFASRLT AYFRRKCVAA TDERVQKMNE  360
VLTYIKFIKM YAWVKAFSQS VQKIREEERR ILEKAGYFQG ITVGVAPIVV VIASVVTFSV  420
HMTLGFDLTA AQAFTVVTVF NSMTFALKVT PFSVKSLSEA SVAVDRFKSL PLMEEVHMIK  480
NKPASPHIKI EMKNATLAWD SSHSSIQNSP KLTPKMKKDK RASRGKKEKV RQLQRTEHQA  540
VLAEQKGHLL LDSDERPSPE EEEGKHIHLG HLRLQRTLHS IDLEIQEGKL VGICGSVGSG  600
KTSLISAILG QMTLLEGSIA ISGTFAYVAQ QAWILNATLR DNILFGKEYD EERYNSVLNS  660
CCLRPDLAIL PSSDLTEIGE RGANLSGGQR QRISLARALY SDRSIYILDD PLSALDAHVG  720
NHIFNSAIRK HLKSKTVLFV THQLQYLVDC DEVIFMKEGC ITERGTHEEL MNLNGDYATI  780
FNNLLLGETP PVEINSKKET SGSQKKSQDK GPKTGSVKKE KAVKPEBGQL VQLEEKGQGS  840
VPWSVYGVYI QAAGGPLAFL VIMALFMLNV GSTAFSTWWL SYWIKQGSGN TTVTRGNETS  900
VSDSMKDNPH MQYYASIYAL SMAVMLILKA IRGVVFVKGT LRASSRLHDE LFRRILRSPM  960
KFFDTTPTGR ILNRFSKDMD EVDVRLPFQA EMPIQNVILV FFCVGMIAGV FPWFLVAVGP  1020
LVILFSVLHI VSRVLIRELK RLDNITQSPF LSHITSSIQG LATIHAYNKG QBFLHRYQEL  1080
LDDNQAPFFL FTCAMRWLAV RLDLISIALI TTTGLMIVLM HGQIPPAYAG LAISYAVQLT  1140
GLFQFTVRLA SETEARFTSV ERINHYIKTL SLEAPARIKN KAPSPDWPQE GEVTFENAEM  1200
RYRENLPLVL KKVSFTIKPK BKIGIVGRTG SGKSSLGMAL FRLVELSGGC IKIDGVRISD  1260
IGLADLRSKL SIIPQBPVLF SGTVRSNLDP FNQYTEDQIW DALERTHMKE CIAQLPLKLE  1320
SEVMENGDNF SVGERQLLCI ARALLRHCKI LILDEATAAM DTETDLLIQB TIREAFADCT  1380
MLTIAHRLHT VLGSDRIMVL AQGQVVEFDT PSVLLSNDSS RFYAMPAAAE NKVAVKG
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Seq ID NO: 385 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001327.1
Coding sequence: 89..631

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GACGGGCGAT GCTGATGGCC CAGGAGGCCC TGGCATTCCT GATGGCCCAG GGGGCAATGC   180
TGGCGGCCCA GGAGAGGCGG GTGCCACGGG CGGCAGAGGT CCCCGGGGCG CAGGGGCAGC   240
AAGGGCCTCG GGGCCGGGAG GAGGCGCCCC GCGGGGTCCG CATGGCGGCG CGGCTTCAGG   300
GCTGAATGGA TGCTGCAGAT GCGGGGCCAG GGGGCCGGAG AGCCGCCTGC TTGAGTTCTA   360
CCTCGCCATG CCTTTCGCGA CACCCATGGA AGCAGAGCTG GCCCGCAGGA GCCTGGCCCA   420
GGATGCCCCA CCGCTTCCCG TGCCAGGGGT GCTTCTGAAG GAGTTCACTG TGTCCGGCAA   480
CATACTGACT ATCCGACTGA CTGCTGCAGA CCACCGCCAA CTGCAGCTCT CCATCAGCTC   540
CTGTCTCCAG CAGCTTTCCC TGTTGATGTG GATCACGCAG TGCTTTCTGC CCGTGTTTTT   600
GGCTCAGCCT CCCTCAGGGC AGAGGCGCTA AGCCCAGCCT GGCGCCCCTT CCTAGGTCAT   660
GCCTCCTCCC CTAGGGAATG GTCCCAGCAC GAGTGGCCAG TTCATTGTGG GGGCCTGATT   720
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Seq ID NO: 386 <u>Protein sequence</u>
Protein Accession #: NP_001318.1

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PRGPHGGAAS GLNGCCRCGA RGPESRLLEF YLAMPFPATPM EAELARRSLA QDAPPLPVPG   120
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Seq ID NO: 387 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 52..459

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GAAGGCCAGG GCACAGGGGG TTCGACGGGC GATGCTGATG GCCCAGGAGG CCCTGGCATT   120
CCTGATGGCC CAGGGGGCAA TGCTGGCGGC CCAGGAGAGG GGGTGCCAC GGGCGGGCAGA   180
GGTCCCCGGG GCGCAGGGGC AGCAAGGGCC TCGGGGCCGA GAGGAGGCGC CCCGCGGGGT   240
CCGCATGGCG GTGCCGCTTC TGCGCAGGAT GGAAGGTGCC CCTGCGGGGC CAGGAGGCCG   300
GACAGCCGCC TGCTTCAGTT CCGACTGACT GCTGCAGACC ACCGCCAACT GCAGCTCTCC   360
ATCAGCTCCT GTCTCCAGCA GCTTTCCCTG TTGATGTGGA TCACGCAGTG CTTTCTGCCC   420
GTGTTTTTGG CTCAGGCTCC CTCAGGGCAG AGGCGCTAAG CCCAGCCTGG CGCCCCTTCC   480
TAGGTCATGC CTCCTCCCCT AGGGAATGGT CCCAGCACGA GTGGCCAGTT CATTGTGGGG   540
GCCTGATTGT TTGTCGCTGG AGGAGGACGG CTTACATGTT TGTTTCTGTA GAAAATAAAG   600
CTGAGCTA
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Seq ID NO: 388 <u>Protein sequence</u>
Protein Accession #: Eos sequence

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  1        11        21        31        41        51
  |        |         |         |         |         |
MQAEGQGTGG STGDADGPGG PGIPDGPGGN AGGPGEAGAT GGRGPRGAGA ARASGPRGGA    60
PRGPHGGAAS AQDGRCPCGA RRPDSRLLQF RLTAADHRQL QLSISSCLQQ LSLLMWITQC   120
FLPVFLAQAP SGQRR
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Seq ID NO: 389 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_005562.1
Coding sequence: 90..3671

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AGACAGAGAC TGAGCGGCCC GGCACCGCCA TGCCTGCGCT CTGGCTGGGC TGCTGCCTCT   120
GCTTCTCGCT CCTCCTGCCC GCAGCCCGGG CCACCTCCAG GAGGGAAGTC TGTGATTGCA   180
ATGGGAAGTC CAGGCCAGTGT ATCTTTGATC GGGAACTTCA CAGACAAACT GGTAATGGAT   240
TCCGCTGCCT CAACTGCAAT GACAACACTG ATGGCATTCA CTGCGAGAAG TGCAAGAATG   300
GCTTTTACCG GCACAGAGAA AGGGACCGCT GTTTGCCCTG CAATTGTAAC TCCAAAGGTT   360
CTCTTAGTGC TCGATGTGAC AACTCTGGAC GGTGCAGCTG TAAACCAGGT GTGACAGGAG   420
CCAGATGCGA CCGATGTCTG CCAGGCTTCC ACATGCTCAC GGATGCGGGG TGCACCCAAG   480
ACCAGAGACT GCTAGACTCC AAGTGTGACT GTGACCCAGC TGGCATCGCA GGGCCCTGTG   540
ACGCGGGCCG CTGTGTCTGC AAGCCAGCTG TTACTGGAGA ACGCTGTGAT AGGTGTCGAT   600
CAGGTTACTA TAATCTGGAT GGGGGGAACC CTGAGGGCTG TACCCAGTGT TTCTGCTATG   660
GGCATTCAGC CAGCTGCCGC AGCTCTGCAG AATACAGTGT CCATAAGATC ACCTCTACCT   720
TTCATCAAGA TGTTGATGGC TGGAAGGCTG TCCAACGAAA TGGGTCTCCT GCAAAGCTCC   780
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TTGTGGCTCC TGCCAAATTT CTTGGGAATC AACAGGTGAG CTATGGGCAA AGCCTGTCCT   900
TTGACTACCG TGTGGACAGA GGAGGCAGAC ACCCATCTGC CCATGATGTG ATTCTGGAAG   960
GTGCTGGTCT ACGGATCACA GCTCCCTTGA TGCCACTTGG CAAGACACTG CCTTGTGGGC  1020
TCACCAAGAC TTACACATTC AGGTTAAATG AGCATCCAAG CAATAATTGG AGCCCCCAGC  1080
TGAGTTACTT TGAGTATCGA AGGTTACTGC GGAATCTCAC AGCCCTCCGC ATCCGAGCTA  1140
CATATGGAGA ATACAGTACT GGGTACATTG ACAATGTGAC CCTGATTTCA GCCCGCCCTG  1200
TCTCTGGAGC CCCAGCACCC TGGGTTGAAC AGTGTATATG TCCTGTTGGG TACAAGGAGC  1260
AATTCTGCCA GGATTGTGCT TCTGGCTACA AGAGAGATTC AGCGAGACTG GGGCCTTTTG  1320
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GCACCTGTAT TCCTTGTAAC TGTCAAGGGG GAGGGGCCTG TGATCCAGAC ACAGGAGATT 1380
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ACGATCCGCA CGACCCCCGC AGCTGCAAGC CATGTCCCTG TCATAACGGG TTCAGCTGCT 1500
CAGTGATGCC GGAGACGGAG GAGGTGGTGT GCAATAACTG CCCTCCCGGG GTCACCGGTG 1560
CCCGCTGTGA GCTCTGTGCT GATGGCTACT TTGGGGACCC CTTTGGTGAA CATGGCCCAG 1620
TGAGGCCTTG TCAGCCCTGT CAATGCAACA ACAATGTGGA CCCCAGTGCC TCTGGGAATT 1680
GTGACCGGCT GACAGGCAGG TGTTTGAAGT GTATCCACAA CACAGCCGGC ATCTACTGCG 1740
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GTGTTTGCAA GCCAGGATTT GGTGGCCCCA ACTGTGAGCA TGGAGCATTC AGCTGTCCAG 1920
CTTGCTATAA TCAAGTGAAG ATTCAGATGG ATCAGTTTAT GCAGCAGCTT CAGAGAATGG 1980
AGGCCCTGAT TTCAAAGGCT CAGGGTGGTG ATGGAGTAGT ACCTGATACA GAGCTGGAAG 2040
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TAACACCAGT GGGAATTGCT GGAGGAACCA GAGGCACTTC CACCTTGGCT GGGAAGACTA 5100
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Seq ID NO: 390 Protein sequence
Protein Accession #: NP_005553.1

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PEGCTQCFCY GHSASCRSSA EYSVHKITST FHQDVDGWKA VQRNGSPAKL QWSQRHQDVF  240
SSAQRLDPVY FVAPAKFLGN QQVSYGQSLS FDYRVDRGGR HPSAHDVILE GAGLRITAPL  300
MPLGKTLPCG LTKTYTFRLN EHPSNNWSPQ LSYFEYRRLL RNLTALRIRA TYGEYSTGYI  360
DNVTLISARP VSGAPAPWVE QCICPVGYKG QFCQDCASGY KRDSARLGPF GTCIPCNCQG  420
GGACDPDTGD CYSGDENPDI ECADCPIGFY NDPHDPRSCK PCPCHNGFSC SVMPETEEVV  480
CNNCPPGVTG ARCELCADGY FGDPPGEHGP VRPCQPCQCN NNVDPSASGN CDRLTGRCLK  540
CIHNTAGIYC DQCKAGYFGD PLAPNPADKC RACNCNPMGS EPVGCRSDGT CVCKPGFGGP  600
NCEHGAFSCP ACYNQVKIQM DQFMQQLQRM EALISKAQGG DGVVPDTELE GRMQQAEQAL  660
QDILRDAQIS EGASRSLGLQ LAKVRSQENS YQSRLDDLKM TVERVRALGS QYQNRVRDTH  720
RLITQMQLSL AESEASLGNT NIPASDHYVG PNGFKSLAQE ATRLAESHVE SASNMEQLTR  780
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1108

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        ETEDYSKQAL SLVRKALHEG VGSGSGSPDG AVVQGLVEKL EKTKSLAQQL TREATQAEIE   840
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        NWKEEAQQLL QNGKSGREKS DQLLSRANLA KSRAQEALSM GNATPYEVES ILKNLREFDL   960
        QVDNRKAEAE EAMKRLSYIS QKVSDASDKT QQAERALGSA AADAQRAKNG AGEALEISSE  1020
        IEQEIGSLNL EANVTADGAL AMEKGLASLK SEMREVEGEL ERKELEFDTN MDAVQMVITE  1080
        AQKVDTRAKN AGVTIQDTLN TLDGLLHLMD QPLSVDEEGL VLLEQKLSRA KTQINSQLRP  1140
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Seq ID NO: 391 DNA sequence
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Coding sequence: 221.856

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ACCTGCCACC CCTGAGCCAG CGCCGGGCGCC CGAGCGAGTC ATGGCCAACG CGGGGCTGCA  240
GCTGTTGGGC TTCATTCTCG CCTTCCTGGG ATGGATCGGC GCCATCGTCA GCACTGCCCT  300
GCCCCAGTGG AGGATTTACT CCTATGCCGG CGACAACATC GTGACCGCCC AGGCCATGTA  360
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Seq ID NO: 392 Protein sequence
Protein Accession #: AAD16433.1

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Seq ID NO: 393 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_006180.1
Coding sequence: 352..2820

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CGGCCGGTGC AGCGCGGGGA CAGGCACTCG GGCTGGCACT GGCTGGCTAGG GATGTCGTCC   360
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Seq ID NO: 394 <u>Protein sequence</u>
Protein Accession #: NP_006171.1

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NETSHTQGSL RITNISSDDS GKQISCVAEN LVGEDQDSVN LTVHPAPTIT FLESPTSDHH   300
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DVTDKTGREH LSVYAVVVIA SVVGFCLLVM LFLLKLARHS KFGMKGPASV ISNDDDSASP   480
LHHISNGSNT PSSSEGGPDA VIIGMTKIPV IENPQYFGIT NSQLKPDTFV QHIKRHNIVL   540
KRELGEGAFG KVFLAECYNL CPEQDKILVA VKTLKDASDN ARKDFHREAE LLTNLQHEHI   600
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      PPESIMYRKF TTESDVWSLG VVLWEIFTYG KQPWYQLSNN EVIECITQGR VLQRPRTCPQ   780
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Seq ID NO: 395 __DNA sequence__
Nucleic Acid Accession #: AF410899
Coding sequence: 483..2999

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Seq ID NO: 396 __Protein sequence__
Protein Accession #: AAL67965.1

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5   NFTRNKLTSL SRKHFRHLDL SELILVGNPF TCSCDIMWIK TLQEAKSSPD TQDLYCLNES   180
    SKNIPLANLQ IPNCGLPSAN LAAPNLTVEE GKSITLSCSV AGDPVPNMYW DVGNLVSKHM   240
    NETSHTQGSL RITNISSDDS GKQISCVAEN LVGEDQDSVN LTVHFAPTIT FLESPTSDHH   300
    WCIPPTVKGN PKPALQWFYN GAILNESKYI CTKIHVTNHT EYHGCLQLDN PTHMNNGDYT   360
    LIAKNEYGKD EKQISAHFMG WPGIDDGANP NYPDVIYEDY GTAANDIGDT TNRSNEIPST   420
    DVTDKTGREH LSVYAVVVIA SVVGFCLLVM LFLLKLARHS KFGMKDFSWF GFGKVKSRQG   480
10  VGPASVISND DDSASPLHHI SNGSNTPSSS EGGPDAVIIG MTKIPVIENP QYFGITNSQL   540
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    FHREAELLTN LQHEHIVKFY GVCVEGDPLI MVPEYMKHGD LNKFLRAHGP DAVLMAEGNP   660
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Seq ID NO: 397 DNA sequence
Nucleic Acid Accession #: AB052906
Coding sequence: 74..814

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    CCTGGGGAAG AAACTAAATG TCACAACGGC CTGGAAAGCA CAGAACCCAG TACTGAGAGA   360
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    TGGATCTTGG CAGTTCAGTT TCGATGGGCA GATCTTCCTC CTCTTTGACT CAGAGAAGAG   540
    AATGTGGACA ACGGTTCATC CTGGAGCCAG AAAGATGAAA GAAAAGTGGG AGAATGACAA   600
    GGTTGTGGCC ATGTCCTTCC ATTACTTCTC AATGGGAGAC TGTATAGGAT GGCTTGAGGA   660
    CTTCTTGATG GGCATGGACA GCACCCTGGA GCCAAGTGCA GGAGCACCAC TCGCCATGTC   720
35  CTCAGGCACA ACCCAACTCA GGGCCACAGC CACCACCCTC ATCCTTTGCT GCCTCCTCAT   780
    CATCCTCCCC TGCTTCATCC TCCCTGGCAT CTGAGGAGAG TCCTTTAGAG TGACAGGTTA   840
    AAGCTGATAC CAAAAGGCTC CTGTGAGCAC GGTCTTGATC AAACTCGCCC TTCTGTCTGG   900
    CCAGCTGCCC ACGACCTACG GTGTATGTCC AGTGGCCTCC AGCAGATCAT GATGACATCA   960
    TGGACCCAAT AGCTCATTCA CTGCCTTGAT TCCTTTTGCC AACAATTTTA CCAGCAGTTA  1020
40  TACCTAACAT ATTATGCAAT TTTCTCTTGG TGCTACCTGA TGGAATTCCT GCACTTAAAG  1080
    TTCTGGCTGA CTAAACAAGA TATATCATTT TCTTTCTTCT CTTTTTGTTT GGAAAATCAA  1140
    GTACTTCTTT GAATGATGAT CTCTTTCTTG CAAATGATAT TGTCAGTAAA ATAATCACGT  1200
    TAGACTTCAG ACCTCTGGGG ATTCTTTCCG TGTCCTGAAA GAGAATTTTT AAATTATTTA  1260
    ATAAGAAAAA ATTTATATTA ATGATTGTTT CCTTTAGTAA TTTATTGTTC TGTACTGATA  1320
45  TTTAAATAAA GAGTTCTATT TCCCAAAAAA AAAAAAAAAA AA
```

Seq ID NO: 398 Protein sequence
Protein Accession #: BAB61048.1

50

```
    1          11         21         31         41         51
    |          |          |          |          |          |
    MAAAAATKIL LCLPLLLLLS GWSRAGRADP HSLCYDITVI PKFRPGPRWC AVQGQVDEKT    60
    FLHYDCGNKT VTPVSPLGKK LNVTTAWKAQ NPVLREVVDI LTEQLRDIQL ENYTPKEPLT   120
    LQARMSCEQK AEGHSSGSWQ FSFDGQIFLL FDSEKRMWTT VHPGARKMKE KWENDKVVAM   180
55  SFHYPSMGDC IGWLEDFLMG MDSTLEPSAG APLAMSSGTT QLRATATTLI LCCLLIILPC   240
    FILPGI
```

Seq ID NO: 399 DNA sequence
Nucleic Acid Accession #: NM_001898.1
60 Coding sequence: 57..482

```
    1          11         21         31         41         51
    |          |          |          |          |          |
    GGCTCTCACC CTCCTCTCCT GCAGCTCCAG CTTTGTGCTC TGCCTCTGAG GAGACCATGG    60
65  CCCAGTATCT GAGTACCCTG CTGCTCCTGC TGGCCACCCT AGCTGTGGCC CTGGCCTGGA   120
    GCCCCAAGGA GGAGGATAGG ATAATCCCGG GTGGCATCTA TAACGCAGAC CTCAATGATG   180
    AGTGGGTACA GCGTGCCCTT CACTTCGCCA TCAGCGAGTA TAACAAGGCC ACCAAAGATG   240
    ACTACTACAG ACGTCCGCTG CGGGTACTAA GAGCCAGGCA ACAGACCGTT GGGGGGGTGA   300
    ATTACTTCTT CGACGTAGAG GTGGGCGCA CCATATGTAC CAAGTCCCAG CCCAACTTGG   360
70  ACACCTGTGC CTTCCATGAA CAGCCAGAAC TGCAGAAGAA ACAGTTGTGC TCTTTCGAGA   420
    TCTACGAAGT TCCCTGGGAG AACAGAAGGT CCCTGGTGAA ATCCAGGTGT CAAGAATCCT   480
    AGGGATCTGT GCCAGGCCAT TCGCACCAGC CACCACCCAC TCCCACCCCC TGTAGTGCTC   540
    CCACCCCTGG ACTGGTGGCC CCCACCCTGC GGGAGGCCTC CCCATGTGCC TGCGCCAAGA   600
    GACGACAGA GAAGGCTGCA GGAGTCCTTT GTTGCTCAGC AGGGCGCTCT GCCCTCCCTC   660
75  CTTCCTTCTT GCTTCTAATA GCCCTGGTAC ATGGTACACA CCCCCCCACC TCCTGCAATT   720
    AAACAGTAGC ATCGCC
```

Seq ID NO: 400 Protein sequence
Protein Accession #: NP_001889.1
80

```
    1          11         21         31         41         51
    |          |          |          |          |          |
    MAQYLSTLLL LLATLAVALA WSPKEEDRII PGGIYNADLN DEWVQRALHF AISEYNKATK    60
    DDYYRRPLRV LRARQQTVGG VNYFFDVEVG RTICTKSQPN LDTCAFHEQP ELQKKQLCSF   120
```

EIYEVPWENR RSLVKSRCQE S

Seq ID NO: 401 DNA sequence
Nucleic Acid Accession #: NM_003976.2
Coding sequence: 299.961

```
1          11         21         31         41         51
|          |          |          |          |          |
CTCTGAGCTT CTCTGAGCCT TGTTTGCTCA TCTGGAAAAA GGGGATTAAA CCATTTACCT    60
CATGGAGTTG TGAAAGAATA GCTGCAAAGC ACCTAACACA TAGTAAGGTT CCCAGTGCAG   120
CTACTTCTGC TGGGTTGAGT CTAGCTGTGT AGGCCCCTTG TTCCTCACCT GGAGAAACTG   180
GGGTGGCAGG CCGGTCCCCC ACAAAAGATA ACTCATCTCT TAATTTGCAA GCTGCCTCAA   240
CAGGAGGGTG GGGGAACAGC TCAACAATGG CTGATGGGCG CTCCTGGTGT TGATAGAGAT   300
GGAACTTGGA CTTGGAGGCC TCTCCACGCT GTCCCACTGC CCCTGGCCTA GGCGGCAGCC   360
TGCCCTGTGG CCCACCCTGG CCGCTCTGGC TCTGCTGAGC AGCGTCGCAG AGGCCTCCCT   420
GGGCTCCGCG CCCCGCAGCC CTGCCCCCG CGAAGGCCCC CCGCCTGTCC TGGCGTCCCC   480
CGCCGGCCAC CTGCCGGGGG GACGCACGGC CCGCTGGTGC AGTGGAAGAG CCCGGCGGCC   540
GCCGCCGCAG CCTTCTCGGC CCGCGCCCCC GCCGCCTGCA CCCCCATCTG CTCTTCCCCG   600
CGGGGGCCGC GCGGCGCGGG CTGGGGGCCC GGGCAGCCGC GCTCGGGCAG CGGGGGCGCG   660
GGGCTGCCGC CTGCGCTCGC AGCTGGTGCC GGTGCGCGCG CTCGGCCTGG GCCACCGCTC   720
CGACGAGCTG GTGCGTTTCC GCTTCTGCAG CGGCTCCTGC CGCCGCGCGC GCTCTCCACA   780
CGACCTCAGC CTGGCCAGCC TACTGGGCGC CGGGGCCCTG CGACCGCCCC CGGGCTCCCG   840
GCCCGTCAGC CAGCCCTGCT GCCGACCCAC GCGCTACGAA GCGGTCTCCT TCATGGACGT   900
CAACAGCACC TGGAGAACCG TGGACCGCCT CTCCGCCACC GCCTGCGGCT GCCTGGGCTG   960
AGGGCTCGCT CCAGGGCTTT GCAGACTGGA CCCTTACCGG TGGCTCTTCC TGCCTGGGAC  1020
CCTCCCGCAG AGTCCCACTA GCCAGCGGCC TCAGCCAGGG ACGAAGGCCT CAAAGCTGAG  1080
AGGCCCCTAC CGGTGGGTGA TGGATATCAT CCCCGAACAG GTGAAGGGAC AACTGACTAG  1140
CAGCCCCAGA GCCCTCACCC TGCGGATCCC AGCCTAAAAG ACACCAGAGA CCTCAGCTAT  1200
GGAGCCCTTC GGACCCACTT CTCACAGACT CTGGCACTGG CCAGGCCTCG AACCTGGGAC  1260
CCCTCCTCTG ATGAACACTA CAGTGGCTGA GGCATCAGCC CCCGCCCAGG CCCTGTAGGG  1320
ACAGCATTTG AAGGACACAT ATTGCAGTTG CTTGGTTGAA AGTGCCTGTG CTGGAACTGG  1380
CCTGTACTCA CTCATGGGAG CTGGCCCC                                      
```

Seq ID NO: 402 Protein sequence
Protein Accession #: NP_003967.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MELGLGGLST LSHCPWPRRQ PALWPTLAAL ALLSSVAEAS LGSAPRSPAP REGPPPVLAS    60
PAGHLPGGRT ARWCSGRARR PPPQPSRPAP PPPAPPSALP RGGRAARAGG PGSRARAAGA   120
RGCRLRSQLV PVRALGLGHR SDELVRFRFC SGSCRRARSP HDLSLASLLG AGALRPPPGS   180
RPVSQPCCRP TRYEAVSFMD VNSTWRTVDR LSATACGCLG
```

Seq ID NO: 403 DNA sequence
Nucleic Acid Accession #: NM_057091.1
Coding sequence: 783..1445

```
1          11         21         31         41         51
|          |          |          |          |          |
ACTGGCCGCT GAGAGAAGAA TCGGGTGGAG CAGAGAGCAG CTGCTGCAGG GCAGACAGCC    60
GGACCCCCAA ATCTGCACGT ACCAGCAGTC AGCCGCCCCA CGCAGGGACC GGCTTACCCC   120
TCGCTCCCCG CCCTCACTCA CTTTCTCCCG CCCTCGGCCC GGCCTCCCAG CTCTCTACTT   180
CGCGTGTCTA CAAACTCAAC TCCCGGTTTC CGTGCCTCTC CACCGCTCGA GTTCTCTACT   240
CTCCATATCC GAGGGGCCCC TCCCAGCATC TACCCCCCTC CCAACCTCGG GGGACCTAGC   300
CAAGCTAGGG GGGACTGGAT CCGACGGGTG GAGCAGCCAG GTGAGCCCCG AAAGGTGGGG   360
CGGGGCAGGG GCGCTCCCAG CCCCACCCCG GGATCTGGTG ACGCTGGGGC TGGAATTTGA   420
CACCGGACGG CTGCGGCGGC GGGCAGGAGG CTGCTGAGGG ATGGAGTTGG GCCCGGCCCC   480
CAGACAAGGC CCGGGGGCTC CGCCAGCAGC AGGTCCCTCG GGCCCCAGCC CTCGCTGCCA   540
CCCGGGCCTG GAGCCCCACA CCCGAGGGTG CAGACTGGCT GCCAAGGCCA CACTTTTGGC   600
TAAAAGAGGC ACTGCCAGGT GTACAGTCCT GGGCATGCGC TGTTTGAGCT TCGGGGGAGA   660
GCCCAGCACT GGTCCCCGGA AAGGTGCCTA GAAGAACAAG GTGCAGGACC CCGTGCTGCC   720
TCAACAGGAG GGTGGGGGAA CAGCTCAACA ATGGCTGATG GGCGCTCCTG GTGTTGATAG   780
AGATGGAACT TGGACTTGGA GGCCTCTCCA CGCTGTCCCA CTGCCCCTGG CCTAGGCGGC   840
AGCCTGCCCT GTGGCCCACC CTGGCCTCTG CT GAGCAGCGTC GCAGAGGCCT   900
CCCTGGGCTC CGCGCCCCGC AGCCCTGCCC CCGCGAAGG CCCCCCGCCT GTCCTGGCGT   960
CCCCCGCGGG CCACCTGCCG GGGGGACGCA CGGCCCGCTG GTGCAGTGGA AGAGCCCGGC  1020
GGCCGCCGCC GCAGCCTTCT CGGCCCGCGC CCCCGCCGCG TGCACCCCCA TCTGCTCTTC  1080
CCCGCGGGGG CCGCGCGGCG CGGGCTGGGG GCCCGGGCAG CCGCGCTCGG CAGCGGGGG   1140
CGCGGGGCTG CCGCCTGCGC TCGCAGCTGG TGCCGGTGCG CGCGCTCGGC CTGGGCCACC  1200
GCTCCGACGA GCTGGTGCGT TTCCGCTTCT GCAGCGGCTC CTGCCGCCGC GCGCGCTCTC  1260
CACACGACCT CAGCCTGGCC AGCCTACTGG GCGCCGGGGC CCTGCGACCG CCCCCGGGCT  1320
CCCGGCCCGT CAGCCAGCCC TGCTGCCGAC CCACGCGCTA CGAAGCGGTC TCCTTCATGG  1380
ACGTCAACAG CACCTGGAGA ACCGTGGACC GCCTCTCCGC CACCGCCTGC GGCTGCCTGG  1440
GCTGAGGGCT CGCTCCAGGG CTTTGCAGAC TGGACCCTTA CCGGTGGCTC TTCCTGCCTG  1500
GGACCCTCCC GCAGAGTCCC ACTAGCCAGC GGCCTCAGCC AGGGACGAAG GCCTCAAAGC  1560
TGAGAGGCCC CTACCGGTGG GTGATGGATA TCATCCCCGA ACAGGTGAAG GGACAACTGA  1620
CTAGCAGCCC CAGAGCCCTC ACCCTGCGGA TCCCAGCCTA AAAGACACCA GAGACCTCAG  1680
CTATGGAGCC CTTCGGACCC ACTTCTCACA GACTCTGGCA CTGGCCAGGC CTCGAACCTG  1740
GGACCCCTCC TCTGATGAAC ACTACAGTGG CTGAGGCATC AGCCCCCGCC CAGGCCCTGT  1800
AGGGACAGCA TTTGAAGGAC ACATATTGCA GTTGCTTGGT TGAAAGTGCC TGTGCTGGAA  1860
CTGGCCTGTA CTCACTCATG GGAGCTGGCC CC                                 
```

Seq ID NO: 404 Protein sequence
Protein Accession #: NP_003967.1

```
        1        11        21        31        41        51
        |        |         |         |         |         |
5       MELGLGGLST LSHCPWPRRQ PALWPTLAAL ALLSSVAEAS LGSAPRSPAP REGPPPVLAS   60
        PAGHLPGGRT ARWCSGRARR PPPQPSRPAP PPPAPPSALP RGGRAARAGG PGSRARAAGA   120
        RGCRLRSQLV PVRALGLGHR SDELVRPRFC SGSCRRARSP HDLSLASLLG AGALRPPPGS   180
        RPVSQPCCRP TRYEAVSFMD VNSTWRTVDR LSATACGCLG
```

Seq ID NO: 405 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_057160.1
Coding sequence: 1..714

```
        1        11        21        31        41        51
        |        |         |         |         |         |
15      ATGCCCGGCC TGATCTCAGC CCGAGGACAG CCCCTCCTTG AGGTCCTTCC TCCCCAAGCC   60
        CACCTGGGTG CCCTCTTTCT CCCTGAGGCT CCACTTGGTC TCTCCGCGCA GCCTGCCCTG   120
        TGGCCCACCC TGGCCGCTCT GGCTCTGCTG AGCAGCGTCG CAGAGGCCTC CCTGGGCTCC   180
        GCGCCCCGCA GCCCTGCCCC CCGCGAAGGC CCCCCGCCTG TCCTGGCGTC CCCCGCCGGC   240
20      CACCTGCCGG GGGGACGCAC GGCCCGCTGG TGCAGTGGAA GAGCCCGGCG GCCGCCGCCG   300
        CAGCCTTCTC GGCCCGCGCC CCCGCCGCCT GCACCCCCAT CTGCTCTTCC CCGCGGGGGC   360
        CGCGCGGCGC GGGCTGGGGG CCCGGGCAGC CGCGCTCGGG CAGCGGGGGC GCGGGGCTGC   420
        CGCCTGCGCT CGCAGCTGGT GCCGGTGCGC GCGCTCGGCC TGGGCCACCG CTCCGACGAG   480
        CTGGTGCGTT TCCGCTTCTG CAGCGGCTCC TGCCGCCGCG CGCGCTCTCC ACACGACCTC   540
25      AGCCTGGCCA GCCTACTGGG CGCCGGGGCC CTGCGACCGC CCCCGGGCTC CCGGCCCGTC   600
        AGCCAGCCCT GCTGCCGACC CACGCGCTAC GAAGCGGTCT CCTTCATGGA CGTCAACAGC   660
        ACCTGGAGAA CCGTGGACCG CCTCTCCGCC ACCGCCTGCG GCTGCCTGGG CTGAGGGCTC   720
        GCTCCAGGGC TTTGCAGACT GGACCCTTAC CGGTGGCTCT TCCTGCCTGG GACCCTCCCG   780
        CAGAGTCCCA CTAGCCAGCG GCCTCAGCCA GGGACGAAGG CCTCAAAGCT GAGAGGCCCC   840
30      TACCGGTGGG TGATGGATAT CATCCCCGAA CAGGTGAAGG GACAACTGAC TAGCAGCCCC   900
        AGAGCCCTCA CCCTGCGGAT CCCAGCCTAA AAGACACCAG AGACCTCAGC TATGGAGCCC   960
        TTCGGACCCA CTTCTCACAG ACTCTGGCAC TGGCCAGGCC TCGAACCTGG GACCCCTCCT   1020
        CTGATGAACA CTACAGTGGC TGAGGCATCA GCCCCCGCCC AGGCCCTGTA GGGACAGCAT   1080
        TTGAAGGACA CATATTGCAG TTGCTTGGTT GAAAGTGCCT GTGCTGGAAC TGGCCTGTAC   1140
35      TCACTCATGG GAGCTGGCCC C
```

Seq ID NO: 406 <u>Protein sequence</u>
Protein Accession #: NP_476501.1

```
        1        11        21        31        41     :  51
        |        |         |         |         |   ..   |
40      MPGLISARGQ PLLEVLPPQA HLGALFLPEA PLGLSAQPAL WPTLAALALL SSVAEASLGS   60
        APRSPAPREG PPPVLASPAG HLPGGRTARW CSGRARRPPP QPSRPAPPPP APPSALPRGG   120
        RAARAGGPGS RARAAGARGC RLRSQLVPVR ALGLGHRSDE LVRFRFCSGS CRRARSPHDL   180
45      SLASLLGAGA LRPPPGSRPV SQPCCRPTRY EAVSFMDVNS TWRTVDRLSA TACGCLG
```

Seq ID NO: 407 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_057090.1
Coding sequence: 29..715

```
        1        11        21        31        41        51
        |        |         |         |         |         |
        CTGATGGGCG CTCCTGGTGT TGATAGAGAT GGAACTTGGA CTTGGAGGCC TCTCCACGCT   60
55      GTCCCACTGC CCCTGGCCTA GGCGGCAGGC TCCACTTGGT CTCTCCGCGC AGCCTGCCCT   120
        GTGGCCCACC CTGGCCGCTC TGGCTCTGCT GAGCAGCGTC GCAGAGGCCT CCCTGGGCTC   180
        CGCGCCCCGC AGCCCTGCCC CCCGCGAAGG CCCCCCGCCT GTCCTGGCGT CCCCCGCCGG   240
        CCACCTGCCG GGGGGACGCA CGGCCCGCTG GTGCAGTGGA AGAGCCCGGC GGCCGCCGCC   300
        GCAGCCTTCT CGGCCCGCGC CCCCGCCGCC TGCACCCCCA TCTGCTCTTC CCCGCGGGGG   360
60      CCGCGCGGCG CGGGCTGGGG GCCCGGGCAG CCGCGCTCGG GCAGCGGGGG CGCGGGGCTG   420
        CCGCCTGCGC TCGCAGCTGG TGCCGGTGCG CGCGCTCGGC CTGGGCCACC GCTCCGACGA   480
        GCTGGTGCGT TTCCGCTTCT GCAGCGGCTC CTGCCGCCGC GCGCGCTCTC CACACGACCT   540
        CAGCCTGGCC AGCCTACTGG GCGCCGGGGC CCTGCGACCG CCCCCGGGCT CCCGGCCCGT   600
        CAGCCAGCCC TGCTGCCGAC CCACGCGCTA CGAAGCGGTC TCCTTCATGG ACGTCAACAG   660
65      CACCTGGAGA ACCGTGGACC GCCTCTCCGC CACCGCCTGC GGCTGCCTGG GCTGAGGGCT   720
        CGCTCCAGGG CTTTGCAGAC TGGACCCTTA CCGGTGGCTC TTCCTGCCTG GGACCCTCCC   780
        GCAGAGTCCC ACTAGCCAGC GGCCTCAGCC AGGGACGAAG GCCTCAAAGC TGAGAGGCCC   840
        CTACCGGTGG GTGATGGATA TCATCCCCGA ACAGGTGAAG GGACAACTGA CTAGCAGCCC   900
        CAGAGCCCTC ACCCTGCGGA TCCCAGCCTA AAAGACACCA GAGACCTCAG CTATGGAGCC   960
70      CTTCGGACCC ACTTCTCACA GACTCTGGCA CTGGCCAGGC CTCGAACCTG GGACCCCTCC   1020
        TCTGATGAAC ACTACAGTGG CTGAGGCATC AGCCCCCGCC CAGGCCCTGT AGGGACAGCA   1080
        TTTGAAGGAC ACATATTGCA GTTGCTTGGT TGAAAGTGCC TGTGCTGGAA CTGGCCTGTA   1140
        CTCACTCATG GGAGCTGGCC CC
```

Seq ID NO: 408 <u>Protein sequence</u>
75   Protein Accession #: NP_476431.1

```
        1        11        21        31        41        51
        |        |         |         |         |         |
        MELGLGGLST LSHCPWPRRQ APLGLSAQPA LWPTLAALAL LSSVAEASLG SAPRSPAPRE   60
80      GPPPVLASPA GHLPGGRTAR WCSGRARRPP PQPSRPAPPP PAPPSALPRG GRAARAGGPG   120
        SRARAAGARG CRLRSQLVPV RALGLGHRSD ELVRFRFCSG SCRRARSPHD LSLASLLGAG   180
        ALRPPPGSRP VSQPCCRPTR YEAVSFMDVN STWRTVDRLS ATACGCLG
```

Seq ID NO: 409 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1746

```
1           11          21          31          41          51
|           |           |           |           |           |
ATGCCACTGA AGCATTATCT CCTTTTGCTG GTGGGCTGCC AAGCCTGGGG TGCAGGGTTG    60
GCCTACCATG GCTGCCCTAG CGAGTGTACC TGCTCCAGGG CCTCCCAGGT GGAGTGCACC   120
GGGGCACGCA TTGTGGCGGT GCCCACCCCT CTGCCCTGGA ACGCCATGAG CCTGCAGATC   180
CTCAACACGC ACATCACTGA ACTCAATGAG TCCCCGTTCC TCAATATCTC AGCCCTCATC   240
GCCCTGAGGA TTGAGAAGAA TGAGCTGTCG CGCATCACGC CTGGGGCCTT CCGAAACCTG   300
GGCTCGCTGC GCTATCTCAG CCTCGCCAAC AACAAGCTGC AGGTTCTGCC CATCGGCCTC   360
TTCCAGGGCC TGGACAGCCT TGAGTCTCTC CTTCTGTCCA GTAACCAGCT GTTGCAGATC   420
CAGCCGGCCC ACTTCTCCCA GTGCAGCAAC CTCAAGGAGC TGCAGTTGCA CGGCAACCAC   480
CTGGAATACA TCCCTGACGG AGCCTTCGAC CACCTGGTAG GACTCACGAA GCTCAATCTG   540
GGCAAGAATA GCCTCACCCA CATCTCACCC AGGGTCTTCC AGCACCTGGG CAATCTCCAG   600
GTCCTCCGGC TGTATGAGAA CAGGCTCACG GATATCCCCA TGGGCACTTT TGATGGGCTT   660
GTTAACCTGC AGGAACTGGC TCTACAGCAG AACCAGATTG GACTGCTCTC CCCTGGTCTC   720
TTCCAACACA ACCACAACCT CCAGAGACTC TACCTGTCCA ACAACCACAT CTCCCAGCTG   780
CCACCCAGCA TCTTCATGCA GCTGCCCCAG CTCAACCGTC TTACTCTCTT TGGGAATTCC   840
CTGAAGGAGC TCTCTCTGGG GATCTTCGGG CCCATGCCCA ACCTGCGGGA GCTTTGGCTC   900
TATGACAACC ACATCTCTTC TCTACCCGAC AATGTCTTCA GCAACCTCCG CCAGTTGCAG   960
GTCCTGATTC TTAGCCGCAA TCAGATCAGC TTCATCTCCC CGGGTGCCTT CAACGGGCTA  1020
ACGGAGCTTC GGGAGCTGTC CCTCCACACC AACGCACTGC AGGACCTGGA CGGGAATGTC  1080
TTCCGCATGT TGGCCAACCT GCAGAACATC TCCCTGCAGA ACAATGCCT CAGACAGCTC  1140
CCAGGGAATA TCTTCGCCAA CGTCAATGGC CTCATGGCCA TCCAGCTGCA GAACAACCAG  1200
CTGGAGAACT TGCCCCTCGG CATCTTCGAT CACCTGGGGA AACTGTGTGA GCTGCGGCTG  1260
TATGACAATC CCTGGAGGTG TGACTCAGAC ATCCTTCCGC TCCGCAACTG GCTCCTGCTC  1320
AACCAGCCTA GGTTAGGGAC GGACACTGTA CCTGTGTGTT TCAGCCCAGC CAATGTCCGA  1380
GGCCAGTCCC TCATTATCAT CAATGTCAAC GTTGCTGTTC AAGCGTCCA TGTCCCTGAG  1440
GTGCCTAGTT ACCCAGAAAC ACCATGGTAC CCAGACACAC CCAGTTACCC TGACACCACA  1500
TCCGTCTCTT CTACCACTGA GCTAACCAGC CCTGTGGAAG ACTACACTGA TCTGACTACC  1560
ATTCAGGTCA CTGATGACCG CAGCGTTTGG GGCATGACCC AGGCCCAGAG CGGGCTGGCC  1620
ATTGCCGCCA TTGTAATTGG CATTGTCGCC CTGGCCTGCT CCCTGGCTGC CTGCGTCGGC  1680
TGTTGCTGCT GCAAGAAGAG GAGCCAAGCT GTCCTGATGC AGATGAAGGC ACCCAATGAG  1740
TGTTAAAGAG GCAGGCTGGA GCAGGGCTGG GGAATGATGG GACTGGAGGA CCTGGGAATT  1800
TCATCTTTCT GCCTCCACCC CTGGGTCCAT GGAGCTTTCC CGTGATTGCT CTTTCTGGCC  1860
CTAGATAAAG GTGTGCCTAC CTCTTCCTGA CTTGCCTGAT TCTCCCGTAG AGAAGCAGGT  1920
CGTGCCGGAC CTTCCTACAA TCAGGAAGAT AGATCCAACT GGCCATGGCA AAAGCCCTGG  1980
GGATTCCGA TTCATACCCC TGGGCTTCCT TCGAGAGGGC TCTTCCTCCA AATCCTCCCC  2040
ACCTGTCCTC CAAGAACAGC CTTCCCTGCG CCCAGGCCCC CTCCGGGCCT CTGTAGACTC  2100
AGTTAGTCCA CAGCCTGCTC ACTTCGTGGG AATAGTTCTC CGCTCGAGATA GCCCCTCTCG  2160
CCTAAGTATT ATGTAAGTTG ATTTCCCTTC TTTTGTTTCT CTTGTTTGTG CTATGGCTTG  2220
ACCCAGCATG TCCCCTCAAA TGAAAGTTCT CCCCTTGATT TTCTGCTCCT GAAGGCAGGG  2280
TGAGTTCTCT CCTCAAAGAA GACTTCAAAC CATTTAACTG GTTTCTTAAG AGCCGTCAAT  2340
CAGCCTGGTT TTGGGGATGC TATGAAAGAG AGAAGGAAAA TCATGCCGCT CAGTTCCTGG  2400
AGACAGAAGA GCCGTCATCA GTGTCTCACT TGTGATTTTT ATCTGGAAAA GGAAGAAACA  2460
CCCCAGCACA GCAAGCTCAG CCTTTTAGAG AAGGATATTT CCAAACTGCA AACTTTGCTT  2520
TGAAAAGTTT AGCCCTTTAA GGAATGAAAT CATGTAGAAT TTTGGACTTC TAAAAACATT  2580
AAAATCAGCT TATTAATACG GGATAGAGAA AGAAATCTGG TGCCTGGGGG TCCCTGTGTT  2640
CACCCCTAGA GTTTGTTTTA AAATTTTTAA TTGAAGCATG TGAAGTGTAC STGCAGAAAA  2700
GTGGGAACAT GATAGTGTAT GGCTTGGTGG ATTTTCACAA ACTGAACATA CCTGTGTAAT  2760
CAGCATCTAG ACCCAGACCC AGAGCATCAC AAATATCCCC CATCCTGGGC TTTTCCCAGA  2820
GGAGATGGGG GCTTCTGAAG ATGGACTTAC CTGGGACCTG CCCCCCATGA GCCAGGACGG  2880
TCCCCCCACA GTCAGCCTGT GCAAAGGCCC CGTGGCCAGG GGTGGAGGAG AATATGTGGG  2940
TGTGGACAGG ATGGGAGACT GTGGCCTGAA CAGGAGATTT TATTATATCT GGAGACCCTG  3000
AGAGACCCTG AGACCTGGGG CACCATGGCT GGCCAGGTCA GAAGCATCCT GACTGCAGAG  3060
GTCCGTGCAG CCACACCCTC TTCCCTGCCA GCAAGTTGTC TGCGGCTCAT CGGAGGCCCC  3120
TCCGCCTGGA GCCTTCTATG GACGTGATAT GCCTGTATCT GTTTTTAATT TTCATTCTTC  3180
ACTTAGGGGA AGTGAAATCG CTCAGAGATG AGATCCTTTA ATTGAAAACG AAGTGTAACG  3240
GAATCTAGTG TCTTTCTAAT GTGGTAAAAT TCTCCATCAA CATCACAGTC AGCTGGCAGC  3300
TGAACTTCAG AATCTCACTT ACAGCAGGCG ACACGGGGGT ACACCGATGG GTCACACTGG  3360
GTCTGGGGGC TCCCTGGAGC TCCTCCTGCG TGTGGTCTGG TTAGGAGTTG AGTTGTTTGC  3420
TCCAGGGTTA TTCTCCTCCT CGAGTCACAG TCACACGAAT ACCTGCCTTC TCTGGCTTTC  3480
CTGCTATACA CATATTCACA TGGCGCTCAA GAAGTTAGGC TCATGGCAAC GTGTGTCTTT  3540
CTCTGGACAA CTGGCCCAGT TTACAGTGAA ATGGAGAATT TCAGGTCTCC ACGTCTGCCC  3600
AGGAAAGAAC TTCAGCTGAC TCCACGGGGA TCTGGAAATC CACGACCAAT CCCGATCGGC  3660
TCTTATTAGC TCCCCGCTCC ACAAGACACC TGTGCTTTGG AAATCCACCA CCAATCCCGA  3720
TCGGCTCTTA TTAGCTCCCC GCTCCACAAG ACACCTGTGA TCTGAAATC TACCACCAAT  3780
CCGATCGGC TCTTATTAGC TCCCCGCTCC ACAAGACACC TGTGACATCC TCCAGGGCCA  3840
CAGGAGCACG TGCTGACCAG TTTTCCCTTC CAGTTCCTGC ACAAAAAGTG TCCAGAGGGC  3900
TGTTTGCAAA CACTAGTGCA CTTTGTAGCT TTTCACCCTC TGTCCCAGGG AATCTAGGAG  3960
AGATGAGGCC CGTCAGAGTC AAGAGATGTC ATCCCCCCAG GGTCTCCAAG GCATTTCCAC  4020
ACTATTGGTG GCACCTGGAG GACATGCACC AAGGCTTGCC AGAGCCAACA GGAAGTGAGC  4080
CCAGAGCATG GCACATGAGC ATCACCCGCT GATGGTGGCC TGCTGTGCCT GGTGCCAACA  4140
GGGGCATCCC GGCCCGTACC CCTCCAGACA GGAAGCATGG GTTTGCCCAC AGACCTGTCG  4200
GGTGCTCCTG TGAGTGGCCT CCAGATGTCT TTGTGCATAG GCACAAGTGG GCCAGGGCTG  4260
GAGGGAGGTG GGAAACCTCA TCATCCGGTG GGCCCTGCCA ATCTTAACCG AGAACCCTTA  4320
GGTATTCCTG GCAGTAGCCA TGACATTGGA GCACCTTCCT CTCCAGCCAG AGGCTGACCT  4380
GAGGGCCACT GTCCTCAGAT GACACCACCC AGGAGCACCC TAGGTGAGGG GTGAGGGCCC  4440
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   FQGLDSLESL LLSSNQLLQI QPAHFSQCSN LKELQLHGNH LEYIPDGAFD HLVGLTKLNL   180
   GKNSLTHISP RVFQHLGNLQ VLRLYENRLT DIPMGTFDGL VNLQELALQQ NQIGLLSPGL   240
   FHNNHNLQRL YLSNNHISQL PPSIFMQLPQ LNRLTLFGNS LKELSLGIFG PMPNLRELWL   300
   YDNHISSLPD NVFSNLRQLQ VLILSRNQIS FISPGAFNGL TELRELSLHT NALQDLDGNV   360
   FRMLANLQNI SLQNNRLRQL PGNIFANVNG LMAIQLQNNQ LENLPLGIFD HLGKLCELRL   420
   YDNPWRCDSD ILPLRNWLLL NQPRLGTDTV PVCFSPANVR GQSLIIINVN VAVPSVHVPE   480
   VPSYPETPWY PDTPSYPDTT SVSSTTELTS PVEDYTDLTT IQVTDDRSVW GMTQAQSGLA   540
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ANLIHSSDPD FQILEDGSVY TTNTILLSSE KRSFTILLSN TENQEKKKIF VFLEHQTKVL   120
KKRHTKEKVL RRAKRRWAPI PCSMLENSLG PFPLFLQQVQ SDTAQNYTIY YSIRGPGVDQ   180
EPRNLFYVER DTGNLYCTRP VDREQYESFE IIAFATTPDG YTPELPLPLI IKIEDENDNY   240
PIFTEETYTF TIFENCRVGT TVGQVCATDK DEPDTMHTRL KYSIIGQVPP SPTLFSMHPT   300
TGVITTTSSQ LDRELIDKYQ LKIKVQDMDG QYFGLQTTST CIINIDDVND HLPTFTRTSY   360
VTSVEENTVD VEILRVTVED KDLVNTANWR ANYTILKGNE NGNFKIVTDA KTNEGVLCVV   420
KPLNYEEKQQ MILQIGVVNE APPSREASPR SAMSTATVTV NVEDQDEGPE CNPPIQTVRM   480
KENAEVGTTS NGYKAYDPET RSSSGIRYKK LTDPTGWVTI DENTGSIKVF RSLDRBAETI   540
KNGIYNITVL ASDQGGRTCT GTLGIILQDV NDNSPFIPKK TVIICKPTMS SAEIVAVDPD   600
EPIHGPPFDF SLESSTSEVQ RMWRLKAIND TAARLSYQND PPFGSYVVPI TVRDRLGMSS   660
VTSLDVTLCD CITENDCTHR VDPRIGGGGV QLGKWAILAI LLGIALLFCI LFTLVCGASG   720
TSKQPKVIPD DLAQQNLIVS NTEAPGDDKV YSANGFTTQT VGASAQGVCG TVGSGIKNGG   780
QBTIEMVKGG HQTSESCRGA GHHHTLDSCR GGHTEVDNCR YTYSEWHSFT QPRLGEESIR   840
GHTLIKN
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Seq ID NO: 419 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_002722.1
Coding sequence: 14..301

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GCGTGGCTCT GTTACTACAG CCACTGCTGG GTGCCCAGGG AGCCCCACTG GAGCCAGTGT   120
ACCCAGGGGA CAATGCCACA CCAGAGCAGA TGGCCCAGTA TGCAGCTGAT CTCCGTAGAT   180
ACATCAACAT GCTGACCAGG CCTAGGTATG GGAAAAGACA CAAAGAGGAC ACGCTGGCCT   240
TCTCGGAGTG GGGGTCCCCG CATGCTGCTG TCCCCAGGGA GCTCAGCCCG CTGGACTTAT   300
AATGCCACCT TCTGTCTCCT ACGACTCCAT GAGCAGCGCC AGCCCAGCTC TCCCCTCTGC   360
ACCCTTGGCT CTGGCCAAAG CTTGCTCCCT GCTCCCACAC AGGCTCAATA AAGCAAGTCA   420
AAGCC
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Seq ID NO: 420 <u>Protein sequence</u>
Protein Accession #: NP_002713.1

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|          |          |          |          |          |
MAAARLCLSL LLLSTCVALL LQPLLGAQGA PLEPVYPGDN ATPEQMAQYA ADLRRYINML   60
TRPRYGKRHK EDTLAFSEWG SPHAAVPREL SPLDL
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Seq ID NO: 421 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_032545.1
Coding sequence: 46..718

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CTATCAAAGA GAGAAACATA ACGGCGGTAG AGAGGAAGTC ACCAAGGTTG CCACTCAGAA   180
GCACCGACAG TCACCGCTCA ACTGGACCTC CAGTCATTTC GGAGAGGTGA CTGGGAGCGC   240
CGAGGGCTGG GGGCCGGAGG AGCCGCTCCC CTACTCCCGG GCTTTCGGAG AGGGTGCGTC   300
CGGCGGGCCG CGCTGCTGCA GGAACGGCGG TACCTGCGTG CTGGGCAGCT TCTGCGTGTG   360
CCCGGCCCAC TTCACCGGCC GCTACTGCGA GCATGACCAG AGGCGCAGTG AATGCGGCGC   420
CCTGGAGCAC GGAGCCTGGA CCCTCCGCGC CTGCCACCTC TGCAGGTGCA TCTTCGGGGC   480
CCTGCACTGC CTCCCCCTCC AGAGCGCCTGA CCGCTGTGAC CCGAAAGACT TCCTGGCCTC   540
CCACGCTCAC GGGCCGAGCG CCGGGGCGC GCCCAGCCTG CTACTCTTGC TGCCCTGCGC   600
ACTCCTGCAC CGCCTCCTGC GCCCGGATGC GCCCGCGCAC CCTCGGTCCC TGGTCCCTTC   660
CGTCCTCCAG CGGGAGCGGC GCCCCTGCGG AAGGCCGGGA CTTGGGCATC GCCTTTAATT   720
TTCTATGTTG TAAATAATAG ATGTGTTTAG TTTACCGTAA GCTGAAGCAC TGGGTGAATA   780
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          TTTTTATTGG GTAATAAATA TTTTCATGAA AGCGCCAAAA AAAAAAAAAA AAAAAAAAAA    840
          AAAAAA
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          MTWRHHVRLL FTVSLALQII NLGNSYQREK HNGGREEVTK VATQKHRQSP LNWTSSHFGE    60
          VTGSAEGWGP EEPLPYSRAF GEGASARPRC CRNGGTCVLG SFCVCPAHFT GRYCEHDQRR   120
          SECGALEHGA WTLRACHLCR CIFGALHCLP LQTPDRCDPK DFLASHAHGP SAGGAPSLLL   180
          LLPCALLHRL LRPDAPAHPR SLVPSVLQRE RRPCGRPGLG HRL
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          1          11         21         31         41         51
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          TCTCCGGACC TGGTGTCAGG GGTGGTCCTA TGCCCAAGCT GGCTGACCGG AAGCTGTGTG   180
          CGGACCAGGA GTGCAGCCAC CCTATCTCCA TGGCTGTGGC CCTTCAGGAC TACATGGCCC   240
          CCGACTGCCG ATTCCTGACC ATTCACCGGG GCCAAGTGGT GTATGTCTTC TCCAAGCTGA   300
          AGGGCCGTGG GCGGCTCTTC TGGGGAGGCA GCGTTCAGGG AGATTACTAT GGAGATCTGG   360
          CTGCTCGCCT GGGCTATTTC CCCAGTAGCA TTGTCCGAGA GGACCAGACC CTGAAACCTG   420
          GCAAAGTCGA TGTGAAGACA GACAAATGGG ATTTCTACTG CCAGTGAGCT CAGCCTACCG   480
          CTGGCCCTGC CGTTTCCCCT CCTTGGGTTT ATGCAAATAC AATCAGCCCA GTGCAAAC
```

```
          1          11         21         31         41         51
          |          |          |          |          |          |
          MARSLVCLGV IILLSAFSGP GVRGGPMPKL ADRKLCADQE CSHPISMAVA LQDYMAPDCR    60
          FLTIHRGQVV YVFSKLKGRG RLFWGGSVQG DYYGDLAARL GYFPSSIVRE DQTLKPGKVD   120
          VKTDKWDFYC Q
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          1          11         21         31         41         51
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          AAGGGAAAAA CACACCAGTC CCAGAAAAGC CTACAGAAAA CCTGGGGAAC ACCACACTGA   180
          CCACTGAGAC CATAAAAGCC CCAGTAAAGT CCACAGAAAA CCCAGAAAAA ACAGCAGCAG   240
          TCACAAAGAC TATAAAACCT TCAGTCAAGG TCACAGGAGA CAAATCTCTC ACTACTACCT   300
          CTTCTCATCT AAATAAAACT GAAGTTACTC ATCAGGTGCC CACTGGTTCT TTCACCCTCA   360
          TTACATCTAG AACGAAGCTG AGTTCTATCA CATCAGAAGC CACAGGAAAC GAGAGCCATC   420
          CATACCTCAA TAAAGATGGC TCACAGAAAG GTATCCACGC TGGACAGATG GGAGAGAATG   480
          ATTCATTCCC TGCATGGGCC ATAGTTATTG TGGTCCTGGT GGCTGTGATT CTCCTCCTGG   540
          TGTTCCTTGG CCTGATCTTC TTGGTCTCCT ATATGATGCG GACACGCCGC ACACTAACCC   600
          AGAACACCCA GTACAATGAT GCAGAGGATG AGGGTGGCCC CAATTCCTAC CCGGTCTACC   660
          TGATGGAGCA GCAGAATCTT GGCATGGGCC AGATCCCTTC CCCACGGTGA TCTTGGAGTA   720
          GGCGCCCAGC CCTGGCTCTT CCATGCTCTG CCCCTTTCCT GGATGAGGAA CCGGACTCAC   780
          AATTTCTATT TCCGGGACTA CAGGAAGGGC AGAGAATACT GACGGTTACC AGTATTAACC   840
          CTTCATCTGT TCTTGAAACT GGTTGGGGAA TGAGGTGATA AGCAAGGAGG GTGTAAGTTT   900
          AGGGGACAAA GAAGAAAGAA TGAATAATAC GAGCAGACAT TCTCTGTAGA AGGTAATGGT   960
          CTGAGAATGA AAAGGTGTTT GATGGACATG TTGTGGGGGC ACCAATGCAG AACACTGCAC  1020
          TGAGTCCTAA AGGAAGGACA GGAGCCTTAT AGGCAATGCC CCAGACTGAC TTGTGAGTGG  1080
          GGTTTATGGG GAAAGGGAGG GACTGAGGGC AGAGTCTCTG GGTTTCAGGA CAGCATTATG  1140
          TTATTTCCAT TCACTATTAC TTAAGAGTTT GTGTGTAAAC AGGCTCATCT CTGAGTTCTC  1200
          AGGACCCTTG CCCCCACCCC CATTTTTTTA ATGAAAAAAA AAAACAAAAA AAACGGATCC  1260
          AAGAAGAAAA GAGAATTTAT TTCCTTCTCC ACTCTCTCCA TGCCCTGGAG AAAAAAAAGT  1320
          CCAGAAGAAA TCATAAATAT CTCTCATCTA CATGGTTGCT TCCTCTTCCT CCCAAAATCCC  1380
          TTAGTTTTCC TAAATGTCTA CAGTGGACGC CCTGTTGGTT TGGCTTGCTG GGTTGTGGGT  1440
          GGACACGCAA GGAGGGGATT TTTATTTGGC CAGCAGTCTC ACCCACTGAT CTCCACCCCA  1500
          GACCTTCCCT GATTGGTGTC TCAGCCATTTA TTTTCCTGTC TCTTCCACCA AAAGCCAGCT  1560
          GTAGCTTTAT CTCGTAAAAG TTACCCATCT TCTCTACTGT CCCCATTCTC TCTCCTCCCA  1620
          CCTTCACCCC AGATTCAAGT TTTCCTCCTT GTAGGCATTT CATCTGTGTG TGTTTCTGG   1680
          ATTTTCTCTC TCTCTTCTTA TGGCCATTTC ACCTTATTAC TGATTGGGTA GAGGGGGAAA  1740
          AGGAGAATGA TGATGATAGT TTCCTTCTGT CTATTGACCT TTTTTATAAT AAAGTATAAC  1800
          ATGTT
```

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          1          11         21         31         41         51
          |          |          |          |          |          |
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          TETIKAPVKS TENPEKTAAV TKTIKPSVKV TGDKSLTTTS SHLNKTEVTH QVPTGSFTLI   120
          TSRTKLSSIT SEATGNESHP YLNKDGSQKG IHAGQMGEND SFPAWAIVIV VLVAVILLLV   180
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FLGLIFLVSY MMRTRRTLTQ NTQYNDAEDE GGPNSYPVYL MEQQNLGMGQ IPSPR

Seq ID NO: 427 DNA sequence
Nucleic Acid Accession #: XM_069480.1
Coding sequence: 1..4383

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CCCCAGAAGG ACTCTGTCTC AGACTGGGCC ATTGTGTTGA TCACTCTCAC TTTGGTGGCA   120
GCAATTGTCA GCCTAATGTA CGGTATCAAG AAGGCCTGCC AGTTCCGGAG GGAGATGAGT   180
CTGGGGTGTG GCTGTGGCTC TGTGACCCCT TACAGCAGCC ACCATGAGGG GGAGGCTGCC   240
AGCCAGCGCT ACTCTTGTCA AATGAAAGCT TCTTGGGGGG CAGGTGCTAC TACATTCCAA   300
GAATATCAGA AAACTGGGGA ACTCTCAACA TCCGATCACA TATTTCCCCT CACTCCAGGC   360
CTTGTTTATA GTATCCCTTT TGATCACATT GTTCTGCATT CAGGACAAAG ACCTCCAGAG   420
CTCCCTAAAT CTACAGAAAT CCATGAGCAA AAACGCCACT GCAACACCAC ACGCCATTCT   480
AAGCCAACTG ACAAGCCTAC AGGCAACTCC AAAACTATAG ACCACAAAAG CTCTACAGAT   540
AATCATGAGG CTCCTCCCAC TTCTGAAGAA AACTCCAGCA ACCAAGGGAA AGACCCAATG   600
ATCCGGAACC AGCGCTCTGT TGATCCTGCT GACTCCACTA CCACACATAA AGAATCCGCT   660
GGAAAAAAAC ATATAACGCC AGCACCCAAG AGCAAAATAA ACTGTCGTAA GTCCACAACA   720
GGCAAATCAA CGGTAACAAG AAAATCAGAT AAAACTGGAA GACCTTTGGA AAAGTCCATG   780
AGTACTTTGG ATAAGACAAG TACCAGCTCA CATAAGACTA CAACTTCCTT CCACAACTCA   840
GGCAATTCAC AGACCAAGCA AAAAAGCACA TCTTTTTCCAG AGCAGCCTCA   900
AAAACAACAT ACAAGACCAC AGGAACCCCA GAAGAGTCAG AAAAAACTGA AGATTCCAGA   960
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TCAGCCAATG AGCTCACACA ATCTCTAGCA GAGCCTACAG AACATGGAGG AAGGACAGCC   1080
AATGAGAACA ACACACCATC CCCAGCAGAG CCTACAGAAA ATAGAGAAAG GACAGCCAAT   1140
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AACACCGCAC CATTCCCAGC AGGGCCTACA GAAAATAGAG ACAGCCAAT GAGAAT   1260
ACCACACTAT TCCCAGCAGA GCCTACAGAA CATGGAGAAA GGACAGCCAA TGAGAACACC   1320
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ACCACACCAT CCCCAGCAGA GCCTACAGAA AATAGAGAAA GGACAGCCAA TGAGAACACC   1560
ACACCATCCC CAGCAGGGCC TACAGAAAAC AGAGAAACGA CAGCCAACGA GAAGACCACA   1620
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Seq ID NO: 428 <u>Protein sequence</u>
Protein Accession #: XP_069480.1

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      LGCGCGSVTP YSSHHEGEAA SQRYSCQMKA SWGAGATTFQ EYQKTGELST SDHIFPLTPG   120
      LVYSIPFDHI VLHSGQRPPE LPKSTEIHEQ KRHCNTTRHS KPTDKPTGNS KTIDHKSSTD   180
      NHEAPPTSEE NSSNQGKDPM IRNQRSVDPA DSTTTHKESA GKKHITPAPK SKINCRKSTT   240
      GKSTVTRKSD KTGRPLEKSM STLDKTSTSS HKTTTSFHNS GNSQTKQKST SFPEKITAAS   300
      KTTYKTTGTP EESEKTEDSR TTVASDKLLT KTTTKNIQETI SANELTQSLA EPTEHGGRTA   360
      NENNTPSPAE PTENRERTAN ENTTLSPAEP TENRERTANE NTAPFPAGPT ENREMTANEN   420
      TTLFPAEPTE HGERTANENT TPSPAEPTEH GERTANENTT PSPAEPTEHG ERTPFANDKT   480
      TSSSAESTEH GERTPLANEN TTPSPAEPTE NRERTANENT TPSPAGPTEN RETTANEKTT   540
      LSPVEPTENR ETTANEKTTP SPAEPTENGQ RTPFANEKTT SSSAEPTEHG ERTPLANENT   600
      TPSPAEPTEN RERTANEKTT PSPAEPTENG DRTPLANEKT TPSLAEPTEN GQRTPFANEK   660
      TTSSSAEPTE HEERTPLANE NTTPSPAEPT ENRERTANEN TTPSPAGPTE NREMTANEKT   720
      TLFPABPTEN RERTANEKTT SSPAEPTENG QRTPFANEKT TSSPAEPTEH GERTPLANEN   780
      TTLSPAEPTE NRERTANEKT TPPPAEPTEN RERTANENTT PSPAQPTENG DRTPLANEKT   840
      TPSLAEPTEN GKRTPFANEK TTSSSAEPTE HAERTPLANE NTTSSPAEPT ENRERTANEK   900
      TTQFPAEPTE NRESTANEKT TPPPAEPTEN REWTANENTT LSPAEPTEHE EMTPLANEKT   960
      TLSPAEPTEN GERTPFTNEK TTPSSAEPTE HGERTPLANE ITTPSRAEPT EHGERIANEK  1020
      ATPSPAKPTE HGETTVNEDT TPSSAEPTEN GERTPLANEN TTTSPTESTE HGERTANEKT  1080
      TPSPAEPTEH GERTPSANEK TIPSPAKPTE HEEMTPSANE NTTPSPVKPT EHGEKTTLAN  1140
      EKITLSPEGP TEHGAKTTSA NEKITPSLAK PTEHGERTTS PNDKITSSAA ESTEHRDRAT  1200
      SANVITPAPA EPIKHAKRTT LAHEKMTQVT EKSTEHPEKT TSTTEKTTRT PEKPTLYSEK  1260
      TICTKGKNTP VPEKPTENLG NTTLTTETIK APVKSTENPE KTAAVTKTIK PSVKVTGDKS  1320
      LTTTSSHLNK TEVTHQVPTG SFTLITSRTK LSSITSEATG NESHPYLNKD GSQKGIHAGQ  1380
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Seq ID NO: 429 <u>DNA sequence</u>
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..10674

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      GTGGAGCGGC TGGGCCAGGC GTTCCGGCGA CGCGTGCGGC TGCTGCGGGA GCTCAGCGAG   240
      CGCCTGGAGC TTGTCTTCCT GGTGGATGAT TCGTCCAGCG TGGCGAAGT CAACTTCCGC   300
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      CTTCATGCTA GAGAAAACTC AACAAAAGTT GTATTTCTCA TCACTGATGG ATATTCCAAT   600
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      CATGAAGATC TACCTTCTGG GAGTTTTATT CAAGATGATA TGGTCCACTG CTCTATATCTT   840
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      GGCCATTTTG AGTGCATCTG TGAAAAGGGG TATTACGGGA AAGGTCTGCA GTATGAATGC   960
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      ATTCCATGTC CTGATGAAAA TCACACCTCT CCACCTGGAA GCACATCCCC TGAAGACTGT  1080
      GTCTGCAGAG AGGGATACAG GGCATCTGGC CAGACCTGTG AACTTGTCCA CTGCCCTGCC  1140
      CTGAAGCCTC CCGAAAATGG TTACTTTATC CAAAACACTT GCAACAACCA CTTCAATGCA  1200
      GCCTGTGGGG TCCGATGTCA CCCTGGATTT GATCTTGTGG GAAGCAGCAT CATCTTATGT  1260
      CTACCCAATG GTTTGTGGTC CGGTTCAGAG AGCTACTGCA GAGTAAGAAC ATGTCCTCAT  1320
      CTCCGCCAGC CGAAACATGG CCACATCAGC TGTTCTACAA GGGAAATGTT ATATAAGACA  1380
      ACATGTTTGG TTGCCTGTGA TGAAGGGTAC AGACTAGAAG GCAGTGAAA GCTTACTTGT  1440
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      TTTCAGATGC CCAAAGATGT CATCATATCC CCCCACAACT GTGGCAAGCA GCCAGCCAAA  1560
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      AAGGTTATTG ATGCAGAACC ACCTGTCATA GACTGGTGCA GATCTCCACC TCCCGTCCAG  1980
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Seq ID NO: 430 Protein sequence
Protein Accession #: FGENESH predicted

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Coding sequence: 1..390

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Seq ID NO: 432 Protein sequence
Protein Accession #: FGENESH predicted

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Seq ID NO: 433 DNA sequence
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TTACAATGTC ATAATTGCCT ATAGTCTTTA CTACATGTTT GCTTCTTTTC AAAGTGAACT  540
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TCACTGTAAT GTGAGTACAG TGAATAAAGG AATACAAGAG ATCATCCAAA TGAATAAAAG  660
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GCTTCCCAGT GAACAATATT GGAATAAAGT GGGCGCTCCA CGGTCAAGTG GAATGAATGA  780
GACTGGAGTA ATTGTTTGGT ATTTAGCACT TTGTCTTCTT CTGGCTTGGC TCATAGTTGG  840
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AGGCATTTCA TACTATATTG GAGCCCAGTC AAATTTTACA AAACTTAAGG AAGCTGAGGT  1020
ATGGAAAGAT GCTGCCACTC AGATATTTTA CTCCCTTTCA GTGGCTTGGG GTGGCTTAGT  1080
TGCTCTATCA TCTTACAATA AGTTCAAAAA CAACTGCTTC TCTGATGCCA TTGTGGTTTG  1140
TTTGACAAAC TGTCTCACTA GCGTGTTTGC TGGATTTGCT ATTTTTTCTA TATTGGGACA  1200
CATGCCCCAT ATATCTGGAA AGGAAGTTTC TCAAGTTGTA AAATCAGGTT TTGATTTGGC  1260
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CACAACAACA ATTCAAGATT TATTTCCCAA AGTGATGAAG AAAATGAGGG TTCCCATAAC  1440
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5       AATTACGCCT ATCCTTTTGA TTGCAATATT TATCTGGTCA TTGGTGCAAT TTCATAGACC  1740
        TAATTATGGC GCAATTCCAT ACCCTGACTG GGGAGTTGCT TTAGGCTGGT GTATGATTGT  1800
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        CATCTTTCAA CGCCTTATAA GTTGCTGCAG ACCAGCTTCT AACTGGGGTC CATACCTGGA  1920
        ACAACATCGT GGGGAAAGAT ATAAAGACAT GGTAGATCCT AAAAAAGAGG CTGACCATGA  1980
        AATACCTACT GTTAGTGGCA GCAGAAAACC GGAATGAGAT CTCATTGAAA AAAATATATG  2040
10      ATTGTATAAT GTGATTTTTT TTAGAATAGG GGGAACCTTA TTTATTTGTG TGTTAACTGA  2100
        ATAGGAAAAT GTACATACTA TGTTCATGAT AGTGTGATTT TTTTCACATT TAAGCAGGAA  2160
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        TTTTGTAAAT AGTATATGCA TTTTTAATAC ATTGGAGGCT TTATTTTGAA CTAATTTCTT  2340
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        AAACTATGAC CCATTTAATT TCTATTGTGT TTCACCAAAT TCAGTGTTGT TCATTATACC  2820
        TCTCTGAAAT ATAGGTTTAA TTTCAAATAG AATATGGACT TAAATGTTAA TGAGAAACTG  2880
        GCTTTAATCA ATTCTAGCAT TTTATTACTG TAATACAGGG CTGATAGAGT GATTTTGTCT  2940
25      TATATGAGTC AGTTACTACT TACAGGTGAT AACTTGCATA CTATTGGAAG ATAAAGTTGT  3000
        CAAACTTGTC AAGAATGAGA AAAGCCAAAT TAGAAAATCC TATGTCCTAG TTTCCTTACC  3060
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        GTTTAAGCAT CATAGCCTAT GATGATAAAC ACTGCCTATA TATGTAAATA GCTTTTCATC  3180
        AATTCTTAAA TTTCTTAACC TAGGCTTCAG GGAGCATATG AAACCAAAAT TATATGAAAA  3240
30      ATTTTCTGTG TGTACATGTA CATGCATTTT TCTAGGGAGA GAGTCCGTAG GTTTATCAGA  3300
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        TTTCTCTTCC TTGTGATTGA AGATGAAAGG AGTAAGAAAT TAAGGCATTT GTTTAATTTA  3480
        TACTGGTAAC TTATTTAGGG GGGAGGGGAC ATGAAGGTAG GTAAATAGGT AGGCCTCTAA  3540
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        CTTGTTCTGT TGCCTGGGCT GGAGTGCAGT GGCATGATCT CAGCTCACTG CAACCTCTGC  3720
        CTTCTGGATT CAAGTGATTC TCCTGCCTCA GCCTCTTGAG TAGCTGGGAC TACAGGTGCC  3780
        CGCCACCACA CCAGCTAATT TTTGTATTTT TAGTAGAGGC GAAGTTTCCC CATGTTGGCC  3840
40      AGGCTGGTCT TGAACTCCCG ACCTCAAGTG ATCTGTCTAC CTCGGCCTCC TAAAGTGCTG  3900
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        CAGTATGTTA CATGCATTCT ACCACTACAT TTTGGTGCTA TTTAAGGTGT GCAATTTTCT  4140
45      ATAGGTGACT TTTGCAATTC AGGGAAGATT TGGGCATATT AAATGAAAGA ATATCTAATT  4200
        GGGGGAGGTG TGAAGGGAAA GAAATTCTTT TCAAAAGCTG ACCACAAAGA GTAGTTAAAA  4260
        GTTTTTGTCA CTATCTTCAC AAGTGTGTAA AGCACAGATT TCAACAGAGT GCTTGGCATA  4320
        TTGTAGGGTG CTCAATGGTG GTTTTTATTA TTATTACTCA GATTCCACAG TGGCAAGAAA  4380
        CATCATTCTA CATAATGGAA AACATTTACA TCAAATCCCA CTTACTTTAA TGCGAACTTG  4440
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Seq ID NO: 434 Protein sequence
Protein Accession #: NP_009162.1

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RPPYLTYSNG GGAFLIPYAI MLALAGLPLF FLECSLGQFA SLGPVSVWRI LPLFQGVGIT   120
MVLISIFVTI YYNVIIAYSL YYMFASFQSE LPWKNCSSWS DKNCSRSPIV THCNVSTVNK   180
GIQEIIQMNK SWVDINNFTC INGSEIYQPG QLPSEQYWNK VALQRSSGMN ETGVIVWYLA   240
LCLLLAWLIV GAALFKGIKS SGKVVYFTAL PPYVVLLILL VRGATLEGAS KGISYYIGAQ   300
SNFTKLKEAE VWKDAATQIF YSLSVAWGGL VALSSYNKFK NNCFSDAIVV CLTNCLTSVF   360
AGPAIFSILG HMAHISGKEV SQVVKSGPDL AFIAYPEALA QLPGGPFWSI LPFFMLLTLG   420
LDSQFASIET ITTTIQDLFP KVMKKMRVPI TLGCCLVLFL LGLVCVTQAG IYWVHLIDHF   480
CAGWGILIAA ILELVGIIWI YGGNRFIEDT EMMIGAKRWI FWLWWRACWF VITPILLIAI   540
PIWSLVQFHR PNYGAIPYPD WGVALGWCMI VFCIIWIPIM AIIKIIQAKG NIFQRLISCC   600
RPASNWGPYL EQHRGERYKD MVDPKKEADH EIPTVSGSRK PE
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Seq ID NO: 435 DNA sequence
Nucleic Acid Accession #: M18728.1
Coding sequence: 51..1085

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TTCTAACCTT CTGGAACCCA CCCACCACTG CCAAGCTCAC TATTGAATCC ACGCCATTCA   180
ATGTCGCAGA GGGGAAGGAG GTTCTTCTAC TCGCCCACAA CCTGCCCCAG AATCGTATTG   240
GTTACAGCTG GTACAAAGGC GAAAGAGTGG ATGGCAACAG TCTAATTGTA GGATATGTAA   300
TAGGAACTCA ACAAGCTACC CCAGGGCCCG CATACAGTGG TCGAGAGACA ATATACCCCA   360
ATGCATCCCT GCTGATCCAG AACGTCACCC AGAATGACAC AGGATTCTAT ACCCTACAAG   420
TCATAAAGTC AGATCTTGTG AATGAAGAAG CAACCGGACA GTTCCATGTA TACCCGGAGC   480
TGCCCAAGCC CTCCATCTCC AGCAACAACT CCAACCCCGT GGAGGACACA GATGCTGTGG   540
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       CCTTCACCTG TGAACCTGAG GTTCAGAACA CAACCTACCT GTGGTGGGTA AATGGTCAGA    600
       GCCTCCCGGT CAGTCCCAGG CTGCAGCTGT CCAATGGCAA CATGACCCTC ACTCTACTCA    660
       GCGTCAAAAG GAACGATGCA GGATCCTATG AATGTGAAAT ACAGAACCCA GCGAGTGCCA    720
       ACCGCAGTGA CCCAGTCACC CTGAATGTCC TCTATGGCCC AGATGTCCCC ACCATTTCCC    780
  5    CCTCAAAGGC CAATTACCGT CCAGGGGAAA ATCTGAACCT CTCCTGCCAC GCAGCCTCTA    840
       ACCCACCTGC ACAGTACTCT TGGTTTATCA ATGGGACGTT CCAGCAATCC ACACAAGAGC    900
       TCTTTATCCC CAACATCACT GTGAATAATA GCGGATCCTA TATGTGCCAA GCCCATAACT    960
       CAGCCACTGG CCTCAATAGG ACCACAGTCA CGATGATCAC AGTCTCTGGA AGTGCTCCTG   1020
       TCCTCTCAGC TGTGGCCACC GTCGGCATCA CGATTGGAGT GCTGGCCAGG GTGGCTCTGA   1080
 10    TATAGCAGCC CTGGTGTATT TTCGATATTT CAGGAAGACT GGCAGATTGG ACCAGACCCT   1140
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       CTCTGCTCCT GAAGCCCTAT ATGCTGGAGA TGGACAACTC AATGAAAATT TAAAGGGAAA   1260
       ACCCTCAGGC CTGAGGTGTG TGCCACTCAG AGACTTCACC TAACTAGAGA CAGTCAAACT   1320
 15    GCAAACCATG GTGAGAAATT GACGACTTCA CACTATGGAC AGCTTTTCCC AAGATGTCAA   1380
       AACAAGACTC CTCATCATGA TAAGGCTCTT ACCCCCTTTT AATTTGTCCT TGCTTATGCC   1440
       TGCCTCTTTC GCTTGGCAGG ATGATGCTGT CATTAGTATT TCACAAGAAG TAGCTTCAGA   1500
       GGGTAACTTA ACAGAGTGTC AGATCTATCT TGTCAATCCC AACGTTTTAC ATAAAATAAG   1560
       AGATCCTTTA GTGCACCCAG TGACTGACAT TAGCAGCATC TTTAACACAG CCGTGTGTTC   1620
 20    AAATGTACAG TGGTCCTTTT CAGAGTTGGA CTTCTAGACT CACCTGTTCT CACTCCCTGT   1680
       TTTAATTCAA CCCAGCCATG CAATGCCAAA TAATAGAATT GCTCCCTACC AGCTGAACAG   1740
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       GCTGAGACTA AGTTGTAGAA ATTAACAAAT GTGCTGCTTG GTTAAAATGG CTACACTCAT   1860
       CTGACTCATT CTTTATTCTA TTTTAGTTGG TTTGTATCTT GCCTAAGGTG CGTAGTCCAA   1920
 25    CTCTTGGTAT TACCCTCCTA ATAGTCATAC TAGTAGTCAT ACTCCCTGGT GTAGTGTATT   1980
       CTCTAAAAGC TTTAAATGTC TGCATGCAGC CAGCCATCAA ATAGTGAATG GTCTCTCTTT   2040
       GGCTGGAATT ACAAAACTCA GAGAAATGTG TCATCAGGAG AACATCATAA CCCATGAAGG   2100
       ATAAAAGCCC CAAATGGTGG TAACTGATAA TAGCACTAAT GCTTTAAGAT TTGGTCACAC   2160
 30    TCTCACCTAG GTGAGCGCAT TGAGCCAGTG GTGCTAAATG CTACATACTC CAACTGAAAT   2220
       GTTAAGGAAG AAGATAGATC CAATTAAAAA AAATTAAAAC CAATTTAAAA AAAAAAAAGA   2280
       ACACAGGAGA TTCCAGTCTA CTTGAGTTAG CATAATACAG AAGTCCCCTC TACTTTAACT   2340
       TTTACAAAAA AGTAACCTGA ACTAATCTGA TGTTAACCAA TGTATTTATT TCTGTGGTTC   2400
       TGTTTCCTTG TTCCAATTTG ACAAAACCCA CTGTTCTTGT ATTGTATTGC CCAGGGGGAG   2460
 35    CTATCACTGT ACTTGTAGAG TGGTGCTGCT TTAATTCATA AATCACAAAT AAAAGCCAAT   2520
       TAGCTCTATA ACT
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Seq ID NO: 436 <u>Protein sequence</u>
Protein Accession #: AAA59907.1

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      NRIGYSWYKG ERVDGNSLIV GYVIGTQQAT PGPAYSGRET IYPNASLLIQ NVTQNDTGFY   120
      TLQVIKSDLV NEEATGQFHV YPELPKPSIS SNNSNPVEDK DAVAFTCEPE VQNTTYLWWV   180
      NGQSLPVSPR LQLSNGNMTL TLLSVKRNDA GSYECEIQNP ASANRSDPVT LNVLYGPDVP   240
      TISPSKANYR PGENLNLSCH AASNPPAQYS WFINGTFQQS TQELFIPNIT VNNSGSYMCQ   300
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Seq ID NO: 437 <u>DNA sequence</u>
Nucleic Acid Accession #: M18728.1
Coding sequence: 1355..1657

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      TTCTAACCTT CTGGAACCCA CCCACCACTG CCAAGCTCAC TATTGAATCC ACGCCATTCA   180
      ATGTCGCAGA GGGGAAGGAG GTTCTTCTAC TCGCCCACAA CCTGCCCCAG AATCGTATTG   240
      GTTACAGCTG GTACAAAGGC GAAAGAGTGG ATGGCAACAG TCTAATTGTA GGATATGTAA   300
      TAGGAACTCA ACAAGCTACC CCAGGGCCCG CATACAGTGG TCGAGAGACA ATATACCCCA   360
      ATGCCATCCCT GCTGATCCAG AACGTCACCC AGAATGACAC AGGATTCTAT ACCCTACAAG   420
      TCATAAAGTC AGATCTTGTG AATGAAGAAG CAACCGGACA GTTCCATGTA TACCCGGAGC   480
      TGCCCAAGCC CTCCATCTCC AGCAACAACT CCAACCCCGT GGAGGACAAG GATGCTGTGG   540
      CCTTCACCTG TGAACCTGAG GTTCAGAACA CAACCTACCT GTGGTGGGTA AATGGTCAGA   600
      GCCTCCCGGT CAGTCCCAGG CTGCAGCTGT CCAATGGCAA CATGACCCTC ACTCTACTCA   660
      GCGTCAAAAG GAACGATGCA GGATCCTATG AATGTGAAAT ACAGAACCCA GCGAGTGCCA   720
      ACCGCAGTGA CCCAGTCACC CTGAATGTCC TCTATGGCCC AGATGTCCCC ACCATTTCCC   780
      CCTCAAAGGC CAATTACCGT CCAGGGGAAA ATCTGAACCT CTCCTGCCAC GCAGCCTCTA   840
      ACCCACCTGC ACAGTACTCT TGGTTTATCA ATGGGACGTT CCAGCAATCC ACACAAGAGC   900
      TCTTTATCCC CAACATCACT GTGAATAATA GCGGATCCTA TATGTGCCAA GCCCATAACT   960
      CAGCCACTGG CCTCAATAGG ACCACAGTCA CGATGATCAC AGTCTCTGGA AGTGCTCCTG  1020
      TCCTCTCAGC TGTGGCCACC GTCGGCATCA CGATTGGAGT GCTGGCCAGG GTGGCTCTGA  1080
      TATAGCAGCC CTGGTGTATT TTCGATATTT CAGGAAGACT GGCAGATTGG ACCAGACCCT  1140
      GAATTCTTCT AGCTCCTCCA ATCCCATTTT ATCCCATGGA ACCACTAAAA ACAAGGTCTG  1200
      CTCTGCTCCT GAAGCCCTAT ATGCTGGAGA TGGACAACTC AATGAAAATT TAAAGGGAAA  1260
      ACCCTCAGGC CTGAGGTGTG TGCCACTCAG AGACTTCACC TAACTAGAGA CAGTCAAACT  1320
      GCAAACCATG GTGAGAAATT GACGACTTCA CACTATGGAC AGCTTTTCCC AAGATGTCAA  1380
      AACAAGACTC CTCATCATGA TAAGGCTCTT ACCCCCTTTT AATTTGTCCT TGCTTATGCC  1440
      TGCCTCTTTC GCTTGGCAGG ATGATGCTGT CATTAGTATT TCACAAGAAG TAGCTTCAGA  1500
      GGGTAACTTA ACAGAGTGTC AGATCTATCT TGTCAATCCC AACGTTTTAC ATAAAATAAG  1560
      AGATCCTTTA GTGCACCCAG TGACTGACAT TAGCAGCATC TTTAACACAG CCGTGTGTTC  1620
      AAATGTACAG TGGTCCTTTT CAGAGTTGGA CTTCTAGACT CACCTGTTCT CACTCCCTGT  1680
      TTTAATTCAA CCCAGCCATG CAATGCCAAA TAATAGAATT GCTCCCTACC AGCTGAACAG  1740
      GGAGGAGTCT GTGCAGTTTC TGACACTTGT TGTTGAACAT GGCTAAATAC AATGGGTATC  1800
      GCTGAGACTA AGTTGTAGAA ATTAACAAAT GTGCTGCTTG GTTAAAATGG CTACACTCAT  1860
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          CTCTAAAAGC  TTTAAATGTC  TGCATGCAGC  CAGCCATCAA  ATAGTGAATG  GTCTCTCTTT  2040
   5      GGCTGGAATT  ACAAAACTCA  GAGAAATGTG  TCATCAGGAG  AACATCATAA  CCCATGAAGG  2100
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          TCTCACCTAG  GTGAGCGCAT  TGAGCCAGTG  GTGCTAAATG  CTACATACTC  CAACTGAAAT  2220
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          ACACAGGAGA  TTCCAGTCTA  CTTGAGTTAG  CATAATACAG  AAGTCCCCTC  TACTTTAACT  2340
  10      TTTACAAAAA  AGTAACCTGA  ACTAATCTGA  TGTTAACCAA  TGTATTTATT  TCTGTGGTTC  2400
          TGTTTCCTTG  TTCCAATTTG  ACAAAACCCA  CTGTTCTTGT  ATTGTATTGC  CCAGGGGGAG  2460
          CTATCACTGT  ACTTGTAGAG  TGGTGCTGCT  TTAATTCATA  AATCACAAAT  AAAAGCCAAT  2520
          TAGCTCTATA  ACT
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  15   Seq ID NO: 438 <u>Protein sequence</u>
        Protein Accession #: AAA59908.1

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          NPNVLHKIRD  PLVHPVTDIS  SIFNTAVCSN  VQWSFSELDF
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        Seq ID NO: 439 <u>DNA sequence</u>
        Nucleic Acid Accession #: M18728.1
  25   Coding sequence: 2370..2501

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          CCTCAGCCCC  TCCCTGCAGA  TTGCATGTCC  CCTGGAAGGA  GGTCCTGCTC  ACAGCCTCAC   120
  30      TTCTAACCTT  CTGGAACCCA  CCCACCACTG  CCAAGCTCAC  TATTGAATCC  ACGCCATTCA   180
          ATGTCGCAGA  GGGGAAGGAG  GTTCTTCTAC  TCGCCCACAA  CCTGCCCCAG  AATCGTATTG   240
          GTTACAGCTG  GTACAAAGGC  GAAAGAGTGG  ATGGCAACAG  TCTAATTGTA  GGATATGTAA   300
          TAGGAACTCA  ACAAGCTACC  CCAGGGCCCG  CATACAGTGG  TCGAGAGACA  ATATACCCCA   360
          ATGCATCCCT  GCTGATCCAG  AACGTCACCC  AGAATGACAC  AGGATTCTAT  ACCCTACAAG   420
  35      TCATAAAGTC  AGATCTTGTG  AATGAAGAAG  CAACCGGACA  GTTCCATGTA  TACCCGGAGC   480
          TGCCCAAGCC  CTCCATCTCC  AGCAACAACT  CCAACCCCGT  GGAGGACAAG  GATGCTGTGG   540
          CCTTCACCTG  TGAACCTGAG  GTTCAGAACA  CAACCTACCT  GTGGTGGGTA  AATGGTCAGA   600
          GCCTCCCGGT  CAGTCCCAGG  CTGCAGCTGT  CCAATGGCAA  CATGACCCTC  ACTCTACTCA   660
          GCGTCAAAAG  GAACGATGCA  GGATCCTATG  AATGTGAAAT  ACAGAACCCA  GCGAGTGCCA   720
  40      ACCGCAGTGA  CCCAGTCACC  CTGAATGTCC  TCTATGGCCC  AGATGTCCCC  ACCATTTCCC   780
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          TCTTTATCCC  CAACATCACT  GTGAATAATA  GCGGATCCTA  TATGTGCCAA  GCCCATAACT   960
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          CTCTGCTCCT  GAAGCCCTAT  ATGCTGGAGA  TGGACAACTC  AATGAAAATT  TAAAGGGAAA  1260
          ACCCTCAGGC  CTGAGGTGTG  TGCCACTCAG  AGACTTCACC  TAACTAGAGA  CAGTCAAACT  1320
  50      GCAAACCATG  GTGAGAAATT  GACGACTTCA  CACTATGGAC  AGCTTTTCCC  AAGATGTCAA  1380
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          TGCCTCTTTC  GCTTGGCAGG  ATGATGCTGT  CATTAGTATT  TCACAAGAAG  TAGCTTCAGA  1500
          GGGTAACTTA  ACAGAGTGTC  AGATCTATCT  TGTCAATCCC  AACGTTTTAC  ATAAAATAAG  1560
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          TTTACAAAAA  AGTAACCTGA  ACTAATCTGA  TGTTAACCAA  TGTATTTATT  TCTGTGGTTC  2400
          TGTTTCCTTG  TTCCAATTTG  ACAAAACCCA  CTGTTCTTGT  ATTGTATTGC  CCAGGGGGAG  2460
          CTATCACTGT  ACTTGTAGAG  TGGTGCTGCT  TTAATTCATA  AATCACAAAT  AAAAGCCAAT  2520
  70      TAGCTCTATA  ACT
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        Seq ID NO: 440 <u>Protein sequence</u>
        Protein Accession #: AAA59909.1

  75
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          1           11          21          31          41          51
          |           |           |           |           |           |
          MLTNVPISVV  LFPCSNLTKP  TVLVLYCPGG  AITVLVEWCC  FNS
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  80   Seq ID NO: 441 <u>DNA sequence</u>
        Nucleic Acid Accession #: NM_002381.2
        Coding sequence: 64..1524

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          1           11          21          31          41          51
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      |        |         |         |          |          |
      AAATCCGAGC CTCGCGTGGG CTCCTGGCCC CCGACGGACA CCACCAGGCC CACGGAGCCC   60
5     ACCATGCCGC GCCCGGCCCC CGCGCGCCGC CTCCCGGGAC TCCTCCTGCT GCTCTGGCCG   120
      CTGCTGCTGC TGCCCTCCGC CGCCCCCGAC CCCGTGGCCC GCCCGGGCTG CCGGAGGCTG   180
      GAGACCCGAG GTCCCGGGGG CAGCCCTGGA CGCCGCCCCT CTCCTGCGGC TCCCGACGGC   240
      GCGCCCGCTT CCGGGACCAG CGAGCCTGGC CGCGCCCGCG GTGCAGGTGT TTGCAAGAGC   300
      AGACCCTTGG ACCTGGTGTT TATCATTGAT AGTTCTCGTA GCGTACGGCC CCTGGAATTC   360
10    ACCAAAGTGA AAACTTTTGT CTCCCGGATA ATCGACACTC TGGACATTGG GCCAGCCGAC   420
      ACGCGGGTGG CAGTGGTGAA CTATGCTAGC ACTGTGAAGA TCGAGTTCCA ACTCCAGGCC   480
      TACACAGATA AGCAGTCCCT GAAGCAGGCT GTGGGTCGAA TCACACCCTT GTCAACAGGC   540
      ACCATGTCAG GCCTAGCCAT CCAGACAGCA ATGGACGAAG CCTTCACAGT GGAGGCAGGG   600
      GCTCGAGAGC CCTCTTCTAA CATCCCTAAG GTGGCCATCA TTGTTACAGA TGGGAGGCCC   660
15    CAGGACCAGG TGAATGAAGT GGCGGCTCGG GCCCAAGCAT CTGGTATTGA GCTCTATGCT   720
      GTGGGCGTGG ACCGGGCAGA CATGGCGTCC CTCAAGATGA TGGCCAGTGA GCCCCTAGAG   780
      GAGCATGTTT TCTACGTGGA GACCTATGGG GTCATTGAGA AACTTTCCTC TAGATTCCAG   840
      GAAACCTTCT GTGCGCTGGA CCCCTGTGTG CTTGGAACAC ACCAGTGCCA GCACGTCTGC   900
      ATCAGTGATG GGGAAGGCAA GCACCACTGT GAGTGTAGCC AAGGATACAC CTTGAATGCC   960
20    GACAAGAAAA CGTGTTCAGC TCTTGATAGG TGTGCTCTTA ACACCCACGG ATGTGAGCAC   1020
      ATCTGTGTGA ATGACAGAAG TGGCTCTTAT CATTGTGAGT GCTATGAAGG TTATACCTTG   1080
      AATGAAGACA GGAAAACTTG TTCAGCTCAA GATAAATGTG CTTTGGGTAC CCATGGGTGT   1140
      CAGCACATTT GTGTGAATGA CAGAACAGGG TCCCATCATT GTGAATGCTA TGAGGGCTAC   1200
      ACTCTGAATG CAGATAAAAA AACATGTTCA GTCCGTGACA AGTGTGCCCT AGGCTCTCAT   1260
25    GGTTGCCAGC ACATTTGTGT GAGTGATGGG GCCGCATCCT ACCACTGTGA TTGCTATCCT   1320
      GGCTACACCT TAAATGAGGA CAAGAAAACA TGTTCAGCCA CTGAGGAAGC ACGAAGACTT   1380
      GTTTCCACTG AAGATGCTTG TGGATGTGAA GCTACACTGG CATTCCAGGA CAAGGTCAGC   1440
      TCGTATCTTC AAAGACTGAA CACTAAACTT GATGACATTT TGGAGAAGTT GAAAATAAAT   1500
      GAATATGGAC AAATACATCG TTAAATTGCT CCAATTTCTC ACCTGAAAAT GTGGACAGCT   1560
30    TGGTGTACTT AATACTCATG CATTCTTTTG CACACCTGTT ATTGCCAATG TTCCTGCTAA   1620
      TAATTTGCCA TTATCTGTAT TAATGCTTGA ATATTACTGG ATAAATTGTA TGAAGATCTT   1680
      CTGCAGAATC AGCATGATTT TTCCAAGGAA ATACATATGC AGATACTTAT TAAGAGCAAA   1740
      CTTTAGTGTC TCTAAGTTAT GACTGTGAAA TGATTGGTAG GAAATAGAAT GAAAAGTTTA   1800
      GTGTTTCTTT ATCTACTAAT TGAGCCATTT AATTTTTAAA TGTTTATATT AGATAACCAT   1860
35    ATTCACAATG GAAACTTTAG GTCTAGTTTC TTTTGATAGT ATTTATAATA TAAATCAATC   1920
      TTATTACTGA GAGTGCAAAT TGTACAAGGT ATTTACACAT ACAACTTCAT ATAACTGAGA   1980
      TGAATGTAAT TTTGAACTGT TTAACACTTT TTGTTTTTTG CTTATTTTGT TGGAGTATTA   2040
      TTGAAGATGT GATCAATAGA TTGTAATACA CATATCTAAA AATAGTTAAC ACAGATCAAG   2100
      TGAACATTAC ATTGCCATTT TTAATTCATT CTGGTCTTTG AAAGAAATGT ACTACTAAAG   2160
40    AGCACTAGTT GTGAATTTAG GGTGTTAAAC TTTTTACCAA GTACAAAAAT CCCAAATTCA   2220
      CTTTATTATT TTGCTTCAGG ATCCAAGTGA CAAAGTTATA TATTTATAAA ATTGCTATAA   2280
      ATCGACAAAA TCTAATGTTG TCTTTTTAAT GTTAGTGATC CACCTGCCTC AGCCTCCCAA   2340
      AGTGCTGGGA TTACAGGCTT GAAAGTCTAA CTTTTTTTTA CTTATATATT TGATACATAT   2400
      AATTCTTTTG GCTTTGAAAC TTGCAACTTT GAGAACAAAA CAGTCCTTTA AATTTTGCAC   2460
45    TGCTCAATTC TGTTTTTCGT TTGCATTGTC TTTAATATAA TAAAAGTTAT TACCTTTACA   2520
      TATTATCATG TCTATTTTTG ATGACTCATC AATTTTGTCT ATTAAAGATA TTTCTTTAAA   2580
      TTAAAAAAAA AAAAAAAAA
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Seq ID NO:  442 Protein sequence
Protein Accession #: NP_002372.1

50    1          11         21         31         41         51
      |          |          |          |          |          |
      MPRPAPARRL PGLLLLLWPL LLLPSAAPDP VARPGFRRLE TRGPGGSPGR RPSPAAPDGA   60
      PASGTSEPGR ARGAGVCKSR PLDLVFIIDS SRSVRPLEFT KVKTFVSRII DTLDIGPADT   120
55    RVAVVNYAST VKIEFQLQAY TDKQSLKQAV GRITPLSTGT MSGLAIQTAM DEAFTVEAGA   180
      REPSSNIPKV AIIVTDGRPQ DQVNEVAARA QASGIELYAV GVDRADMASL KMMASEPLEE   240
      HVFYVETYGV IEKLSSRFQE TFCALDPCVL GTHQCQHVCI SDGEGKHHCE CSQGYTLNAD   300
      KKTCSALDRC ALNTHGCEHI CVNDRSGSYH CECYEGYTLN EDRKTCSAQD KCALGTHGCQ   360
      HICVNDRTGS HHCECYEGYT LNADKKTCSV RDKCALGSHG CQHICVSDGA ASYHCDCYPG   420
      YTLNEDKKTC SATEEARRLV STEDACGCEA TLAFQDKVSS YLQRLNTKLD DILEKLKINE   480
60    YGQIHR
```

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Seq ID NO:  443 DNA sequence
Nucleic Acid Accession #:  NM_016639.1
Coding sequence: 40..429

65    1          11         21         31         41         51
      |          |          |          |          |          |
      GCGGCGGGCG CAGACAGCGG CGGGCGCAGG ACGTGCACTA TGGCTCGGGG CTCGCTGCGC   60
70    CGGTTGCTGC GGCTCCTCGT GCTGGGGCTC TGGCTGGCGT TGCTGCCGTC CGTGGCCCGG   120
      GAGCAAGCGC CAGGCACCGC CCCCTGCTCC CGCGGCAGCT CCTGGAGCGC GGACCTGGAC   180
      AAGTGCATGG ACTGCGCGTC TTGCAGGGCG CGACCGCCACA GCGACTTCTG CCTGGGCTGC   240
      GCTGCAGCAC CTCCTGCCCC CTTCCGGCTG CTTTGGCCCA TCCTGGGGG CGCTCTGAGC   300
      CTGACCTTCG TGCTGGGGCT GCTTTCTGGC TTTTTGGTCT GGAGACGATG CCGCAGGAGA   360
      GAGAAGTTCA CCACCCCCAT AGAGGAGACC GGCGGAGAGG GCTGCCCAGC TGTGGCGCTG   420
75    ATCCAGTGAC AATGTGCCCC CTGCCAGCCG GGGCTCGCCC ACTCATCATT CATTCATCCA   480
      TTCTAGAGCC AGTCTCTGCC TCCCAGACGC GGCGGGAGCC AAGCTCCTCC AACCACAAGG   540
      GGGGTGGGGG GCGGTGAATC ACCTCTGAGG CCTGGGCCCA GGGTTCAGGG GAACCTTCCA   600
      AGGTGTCTGG TTGCCCTGCC TCTGGCTCCA GAACAGAAAG GGAGCCTCAC GCTGGCTCAC   660
      ACAAAACAGC TGACACTGAC TAAGGAACTG CAGCATTTGC ACAGGGGAGG GGGGTGCCCT   720
80    CCTTCCTTAG GACCTGGGGG CCAGGCTGAC TTGGGGGGCA GACTTGACAC TAGGCCCCAC   780
      TCACTCAGAT GTCCTGAAAT TCCACCACGG GGGTCACCCT GGGGGGTTAG GGACCTATTT   840
      TTAACACTAG GGCTGGCCCC ACTAGGAGGG CTGGCCCTAA GATACAGACC CCCCCAACTC   900
      CCCAAAGCGG GGAGGAGATA TTTATTTTGG GGAGAGTTTG GAGGGGAGGG AGAATTTATT   960
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1129

AATAAAAGAA TCTTTAACTT TAAAAAAAAA AAAAAAAA

Seq ID NO: 444 <u>Protein sequence</u>
Protein Accession #: NP_057723.1

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1          11         21         31         41         51
|          |          |          |          |          |
MARGSLRRLL RLLVLGLWLA LLRSVAGEQA PGTAPCSRGS SWSADLDKCM DCASCRARPH   60
SDFCLGCAAA PPAPFRLLWP ILGGALSLTP VLGLLSGFLV WRRCRRREKF TTPIEETGGE  120
GCPAVALIQ
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Seq ID NO: 445 <u>DNA sequence</u>
Nucleic Acid Accession #: AF322916.1
Coding sequence: 50..4300

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1          11         21         31         41         51
|          |          |          |          |          |
GCACTCCGCA GCCTTTAAGG TTCGCGCGGG GGCCAGGCAA GAGTTAGCCA TGAAGAGCCT   60
CAAGTCCCGC CTGAGGAGGC AGGACGTGCC CGGCCCCGCG TCGTCTGGCG CCGCCGCCGC  120
CAGCGCGCAT GCAGCAGATT GGAATAAATA TGATGACCGA TTGATGAAAG CAGCAGAAAG  180
GGGGGATGTA GAAAAAGTGA CCTCAATCCT TGCTAAAAAG GGGGTCAATC CAGGCAAACT  240
AGATGTGGAA GGCAGATCTG TCTTCCATGT TGTGACCTCA AAGGGGAATC TTGAGTGTTT  300
GAATGCCATC CTTATACATG GAGTTGATAT TACAACCAGT GACACTGCAG GGAGAAATGC  360
TCTTCACCTG GCTGCTAAGT ATGGACATGC ATTGTGCCTA CAAAAACTTC TACAGTACAA  420
TTGTCCCACT GAGCATGCAG ACCTGCAGGG AAGAACTGCA CTTCAAAAAA AAGCAATGGC  480
AGATTGTCCT TCTAGCTACA AGCTGCTTTG TGACCATGGG GCCTCTGTGA ATGCCAAAGA  540
TGTAAAAGGG CGGACACCAC TTGTTCTGGC TACTCAGATG AGTAGGCCAA CAATATGTCA  600
ACTGCTGATA GATAGAGGAG CGGATGTTAA TTCCAGAGAC AAACAAAACA GAACTGCCCT  660
CATGCTAGGT TGCGAATATG GTTGCAGAGA TGCAGTAGAA GTCTTAATTA AAAATGGTGC  720
TGATATAAGC TTGCTGGATG CGCTTGGCCA TGATAGTTCT TACTATGCAA GAATTGGTGA  780
CAATCTGGAC ATTCTAACCT TGTTGAAGAC TGCATCGGAA AATACCAACA AAGGGAGAGA  840
ACTTTGGAAG AAAGGACCAT CTTTGCAACA GCGAAATTTG ACACACATGC AAGATGAAGT  900
AAATGTGAAG TCACATCAGA GGGAGCATCA AAATATTCAG GATTTGGAGA TTGAAAATGA  960
AGATTTGAAA GAGAGGTTGA GAAAAATTCA GCAAGAACAA AGAATACTTT TGGATAAAGT 1020
CAATGGTTTA CAGTTACAGC TGAATGAGGA AGTTATGGTT GCTGATGATC TGGAAAGCGA 1080
GAGAGAAAAG CTGAAGTCCC TTTTGGCAGC TAAAGAAAAG CAACATGAAG AAAGCTTAAG 1140
GACTATTGAG GCTCTGAAAA ATAGATTTAA ATATTTTGAG AGTGATCATT TAGGATCAGG 1200
AAGTCATTTC AGTAACCGAA AAGAAGATAT GCTTCTTAAA CAAGGTCAGA TGTATATGGC 1260
AGACTCACAG TGTACTTCCC CAGGTATACC AGCCCATATG CAAAGCAGAT CTATGTTAAG 1320
ACCTCTGGAA CTATCTTTAC CCAGTCAAAC GTCATACTCT GAAAATGAAA TTTTAAAGAA 1380
AGAGTTAGAA GCAATGCGAA CTTTCTGTGA GTCAGCAAAA CAAGACCGAC TGAAGCTCCA 1440
AAATGAACTG CACACACAAG TGGCAGAATG CAAAGCTTTA GCATTAGAAT GTGAAAGGGT 1500
CAAGGAGGAT TCAGATGAAC AGATAAAGCA ATTAGAAGAT GCATTAAAAG ATGTGCAGAA 1560
GAGGATGTAT GAGTCAGAAG GTAAAGTTAA ACAAATGCAG ACCCATTTTC TTGCCCTTAA 1620
AGAACACTTA ACAAGTGAAG CAGCCTCAGG GAATCACAGA CTAACCGAGG AACTGAAGGA 1680
TCAGTTGAAA GACTTGAAAG TAAAAATGA GGTGCTTCA GCAGAAGTGG GGAAATTAAG 1740
AAACCAAATC AAACAAAATG AGATGATAGT AGAAGAGTTT AAGAGGGATG AAGGCAAGCT 1800
GATGAGAGAA AATAAGCGAT TACAGAAGGA ACTTAGTATG TGTGAAATGG AGCGAGAGAA 1860
GAAAGGAAGA AAGGTCACGA AGATGGAAGG CCAGGCAAAA GAATTGTCAG CGAAGTTGGC 1920
CCTTTCCATT CCAGCTGAAA AATTTGAAAA CATGAAGAGC TCATTATCAA ATGAAGTGAA 1980
TGAGAAAGCA AAAAAATTAG TAGAAATGGA AAGAGAACAT TTAGTGAAAT 2040
TAGACAGTTA AAGAGAGAAC TTGAGAATGT TAAGGCCAAG CTTGCTCAGC ACGTCAAACC 2100
AGAGGAACAT GAACAGGTTA AGAGCAGATT AGAACAGAAA TCAGGAGAAC TTGGGAAGAA 2160
GATCACTGAG TTAACATTGA AAATCAGAC ACTACAAAAG GAAATTGAAA AAGTTTATTT 2220
GGATAATAAG CTCCCTCAAGG AGCAAGCACA TAACTTAACA ATTGAAATGA AAAATCATTA 2280
TGTTCCTTTA AAAGTAAGTG AAGACATGAA AAAGTCACAT GATGCAATTA TTGATGATCT 2340
TAATAGAAAG CTTTTAGATG TAACACAAAA ATATACAGAA AAGAAGTTGG AAATGGGAAA 2400
ATTGCTACTG GAAAATGACA GCTTAAGTAA GGATGTAAGC CGCCTAGAAA CTGTGTTTGT 2460
ACCTCCTGAG AAACATGAAA AAGAGATAAT AGCTCTGAAA TCCAATATTG TTGAACTTAA 2520
GAAACAGCTG TCTGAACTTA AGAAAAAATG TGGTGAAGAC CAGGAGAAAA TACACGCTCT 2580
CACATCTGAA AACACTAACT TGAAGAAGAT GATGAGTAAT CAGTATGTGC CAGTTAAAAC 2640
CCATGAAGAG GTTAAAATGA CACTGAATGA CACGTTAGCC AAAACTAACA GAGAATTATT 2700
AGATGTGAAG AAAAAATTTG AAGTATATAAA TCAGGAATTT GTAAAAATAA AAGATAAGAA 2760
TGAAATATTA AAAGAAACC TGGAAAACAC TCAGAACCAA ATAAAAGCTG AGTACATCAG 2820
CCTGGCAGAG CACGAGGCAA AGATGAGCTC GCTAAGTCAG AGCATGAGAA AGGTGCAGGA 2880
TAGTAATGCT GAAATCTTGG CCAACTACAG AAAAGGCCAA GAAGAGATTG TGACACTGCA 2940
TGCCGAAATT AAGCCCAGA AGAAGGAGCT CGACACAATA TTAAGGTAAA 3000
ATATGCCCCA ATTGTCAGCT TTGAGGAGTG CGAGAGAAAA TTTAAAGCAA CAGAGAAAGA 3060
ACTAAAAGAC CAGTTATCAG AGCAGACACA AAAGTATAGT GTCAGTGAAG AAGAAGTCAA 3120
GAAAACAAG CAAGAGAATG ACAAGTTAAA GAAGGAGATT TTTACCCTTC AAAAGAGTTT 3180
GAGAGATAAG ACAGTTCTCA TTGAGAAGTC TCATGAAATG GAAAGAGCAT TAAGCAGAAA 3240
AACAGACGAG CTAAACAAAC AGTTAAAAGA CTTGTCACAG AAATACACGG AAGTAAAGAA 3300
TGTGAAAGAG AAGCTAGTAG AAGAAAATGC CAAACAGACT TCTGAGATAC TTGCAGTGCA 3360
AAATCTTTTG CAAAAACAAC ATGTTCCATT GGAACAGGTT GAGGCTCTGA AAAAATCTCT 3420
TAATGGCACA ATTGAAAATC TAAAGGAAGA ACTGAAGAGT ATGCAAAGGT GTTACGAGAA 3480
AGAGCAGCAG ACAGTGACCA AACTGCATCA ATTGTTGGAG AATCAAAAGA ACTCTTCTGT 3540
ACCCCTGGCA GAGCATTTGC AGATTAAAGA AGCATTTGAG AAAGAAGTTG GAATCATAAA 3600
AGCCAGCTTG AGAGAAAAGG AAGAAGAAAG CCAAACAAA ATGGAAGAAG TCTCCAAACT 3660
TCAGTCGGAG GTTCAGAATA CTAAACAAGC ATTAAAAAAA TTAGAGACTA GAGAGGTAGT 3720
TGACTTGTCT AAATATAAAG CAACAAAAGA TGATTTGGAG ACACAGATTT CTAGCTTAAA 3780
TGAAAAAATTG GCCAATCTGA ATAGAAAGTA TGAGGAAGTA TGTGAGGAAG TTTTGCATGC 3840
CAAAAAGAAG GAAATATCTG CAAAGATGA GAAGGAATTA CTGCATTTCA GCATTGAGCA 3900
AGAAATTAAG GATCAGAAGG AACGATGTGA TAAGTCCTTA ACAACAATCA CAGAGTTACA 3960
AAGAAGAATA CAAGAATCTG CTAAACAAT AGAAGCAAAA GATAATAAGA TAACTGAACT 4020
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1130

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GCTTAATGAT GTGGAAAGAT TAAAACAGGC ACTCAATGGC CTTTCCCAAC TCACCTACAC   4080
AAGTGGGAAC CCCACCAAGA GGCAGAGCCA GCTGATTGAC ACTCTGCAGC ACCAAGTGAA   4140
ATCTCTGGAG CAACAGCTGG CCGATGCTGA CAGACAGCAC CAAGAAGTAA TTGCAATTTA   4200
TCGGACACAC CTTCTTAGTG CTGCACAGGG TCACATGGAT GAAGATGTTC AGGAGGGCTCT  4260
GCTCCAGATC ATACAAATGC GGCAGGGGCT TGTGTGCTAG CCGTTAGCAC TGACTGCCAG   4320
TATCTGTTTT ATCTTGCTGG TGCTGAACAT TCTTTGTGCA ACTCCATGGT CTTTCTGGGC   4380
CTTACTGTGC TGGTATAATT AAAATAAAAT ATATTTTGTT CTGGGTGT
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Seq ID NO: 446 Protein sequence
Protein Accession #: AAG49577.1

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1          11         21         31         41         51
|          |          |          |          |          |
MKSLKSRLRR QDVPGPASSG AAAASAHAAD WNKYDDRLMK AAERGDVEKV TSILAKKGVN   60
PGKLDVEGRS VFHVVTSKGN LECLNAILIH GVDITTSDTA GRNALHLAAK YGHALCLQKL   120
LQYNCPTEHA DLQGRTALQK KAMADCPSSI QLLCDHGASV NAKDVKGRTP LVLATQMSRP   180
TICQLLIDRG ADVNSRDKQN RTALMLGCEY GCRDAVEVLI KNGADISLLD ALGHDSSYYA   240
RIGDNLDILT LLKTASENTN KGRELWKKGP SLQQRNLTHM QDEVNVKSHQ REHQNIQDLE   300
IENEDLKERL RKIQQEQRIL LDKVNGLQLQ LNEEVMVADD LESEREKLKS LLAAKEKQHE   360
ESLRTIEALK NRFKYFESDH LGSGSHFSNR KEDMLLKQGQ MYMADSQCTS PGIPAHMQSR   420
SMLRPLELSL PSQTSYSENE ILKKELEAMR TFCESAKQDR LRLQNELAHK VAECKALALE   480
CERVKEDSDE QIKQLEDALK DVQKRMYESE GKVKQMQTHP LALKEHLTSE AASGNHRLTE   540
ELKDQLKDLK VKYEGASAEV GKLRNQIKQN EMIVEEFKRD EGKLIEENKR LQKELSMCEM   600
EREKKGRKVT EMEGQAKELS AKLALSIPAE KFENMKSSLS NEVNEKAKKL VEMBREHEKS   660
LSEIRQLKRE LENVKAKLAQ HVKPEEHEQV KSRLEQKSGE LGKKITELTL KNQTLQKEIE   720
KVYLDNKLLK EQAHNLTIEM KNHYVPLKVS EDMKKSHDAI IDDLNRKLLD VTQKYTEKKL   780
EMEKLLLEND SLSKDVSRLE TVFVPPEKHE KEIIALKSNI VELKKQLSEL KKKCGEDQEK   840
IHALTSENTN LKKMMSNQYV PVKTHEEVKM TLNDTLAKTN RELLDVKKKP EDINQEFVKI   900
KDKNEILKRN LENTQNQIKA EYISLAEHEA KMSSLSQSMR KVQDSNAEIL ANYRKGQEEI   960
VTLHAEIKAQ KKELDTIQEC IKVKYAPIVS PEECERKFKA TEKELKDQLS EQTQKYSVSE   1020
EEVKKNKQEN DKLKKEIFTL QKDLRDKTVL IEKSHEMERA LSRKTDELNK QLKDLSQKYT   1080
EVKNVKEKLV EENAKQTSEI LAVQNLLQKQ HVPLEQVEAL KKSLNGTIEN LKEELKSMQR   1140
CYEKEQQTVT KLHQLLENQK NSSVPLAEHL QIKEAFEKEV GIIKASLREK EEESQNKMEE   1200
VSKLQSEVQN TKQALKKLET REVVDLSKYK ATKSDLETQI SSLNEKLANL NRKYEEVCEE   1260
VLHAKKKEIS AKDEKELLHF SIEQBIKDQK ERCDKSLTTI TELQRRIQES AKQIEAKDNK   1320
ITELLNDVER LKQAINGLSQ LTYTSGNPTK RQSQLIDTLQ HQVKSLEQQL ADADRQHQEV   1380
IAIYRTHLLS AAQGHMDEDV QEALLQIIQM RQGLVC
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Seq ID NO: 447 DNA sequence
Nucleic Acid Accession #: NM_003020.1
Coding sequence: 29..664

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1          11         21         31         41         51
|          |          |          |          |          |
CGCTCCTCGG GCTGCCCCTC GGTTGACAAT GGTCTCCAGG ATGGTCTCTA CCATGCTATC   60
TGGCCTACTG TTTTGGCTGG CATCTGGATG GACTCCAGCA TTTGCTTACA GCCCCCGGAC   120
CCCTGACCGG GTCTCAGAAG CAGATATCCA GAGGCTGCTT CATGGTGTTA TGGAGCAATT   180
GGGCATTGCC AGGCCCCGAG TGGAATATCC AGCTCACCAG GCCATGAATC TTGTGGGCCC   240
CCAGAGCATT GAAGGTGGAG CTCATCAAGG ACTTCAGCAT TTGGGTCCTT TTGGCAACAT   300
CCCCAACATC GTGGCAGAGT TGACTGGAGA CAACATTCCT AAGGACTTTA GTGAGGATCA   360
GGGGTACCCA GACCCTCCAA ATCCCTGTCC TGTTGGAAAA ACAGATGATG GATGTCTAGA   420
AAACACCCCT GACACTGCAG AGTTCAGTCG AGAGTTCCAG TTGCACCAGC ATCTCTTTGA   480
TCCGGAACAT GACTATCCAG GCTTGGGCAA GTGGAACAAG AAACTCCTTT ACGAGAAGAT   540
GAAGGGAGGA GAGAGACGAA AGCGGAGGAG TGTCAATCCA TATCTACAAG GACAGAGACT   600
GGATAATGTT GTTGCAAAGA AGTCTGTCCC CCATTTTTCA GATGAGGATA AGGATCCAGA   660
GTAAAGAGAA GATGCTAGAC GAAAACCCAC ATTACCTGTT AGGCCTCAGC ATGGCTTATG   720
TGCACGTGTA AATGGAGTCC CTGTGAATGA CAGCATGTTT CTTACATAGA TAATTATGGA   780
TACAAAGCAG CTGTATGTAG ATAGTGTATT GTCTTCACAC CGATGATTCT GCTTTTTGCT   840
AAATTAGAAT AAGAGCTTTT TTGTTTCTTG GGTTTTTAAA ATGTGAATCT GCAATGATCA   900
TAAAAATTAA AATGTGAATG TCAACAATAA AAAGCAAGAC TATGAAAGGC TCAGATTTCT   960
TGCAGTTTAA AATGGTGTCT GAGGTTGTAC TATTTTGGCC AAGTCTGTAG AAAGCTGTCA   1020
TTTGATTTTG ATTATGTAGT TCATCCAGCC CTTGGGCATT GTTATACACC AGTAAAGAAG   1080
GCTGTACTCA AGAGGAGGAG CTGACACATT TCACTTGGCT GCGTCTTAAT AAACATGAAT   1140
GCAAGCATTG GC
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Seq ID NO: 448 Protein sequence
Protein Accession #: NP_003011.1

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1          11         21         31         41         51
|          |          |          |          |          |
MVSRMVSTML SGLLFWLASG WTPAFAYSPR TPDRVSEADI QRLLHGVMEQ LGIARPRVEY   60
PAHQAMNLVG PQSIEGGAHE GLQHLGPFGN IPNIVAELTG DNIPKDFSED QGYPDPPNPC   120
PVGKTDDGCL ENTPDTAEFS REFQLHQHLF DPEHDYPGLG KWNKKLLYEK MKGGERRKRR   180
SVNPYLQGQR LDNVVAKKSV PHPSDEDKDP E
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Seq ID NO: 449 DNA sequence
Nucleic Acid Accession #: NM_003816.1
Coding sequence: 79..2538

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1          11         21         31         41         51
|          |          |          |          |          |
CGGCAGGGTT GGAAAATGAT GGAAGAGGCG GAGGTGGAGG CGACCGAGTG CTGAGAGGAA   60
CCTGCGGAAT CGGCCGAGAT GGGGTCTGGC GCGCGCTTTC CCTCGGGGAC CCTTCGTGTC   120
CGGTGGTTGC TGTTGCTTGG CCTGGTGGGC CCAGTCCTCG GTGCGGCGCG GCCAGGCTTT   180
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CAACAGACCT CACATCTTTC TTCTTATGAA ATTATAACTC CTTGGAGATT AACTAGAGAA   240
AGAAGAGAAG CCCCTAGGCC CTATTCAAAA CAAGTATCTT ATGTTATTCA GGCTGAAGGA   300
AAAGAGCATA TTATTCACTT GGAAAGGAAC AAAGACCTTT TGCCTGAAGA TTTTGTGGTT   360
TATACTTACA ACAAGGAAGG GACTTTAATC ACTGACCATC CCAATATACA GAATCATTGT   420
CATTATCGGG GCTATGTGGA GGGAGTTCAT AATTCATCCA TTGCTCTTAG CGACTGTTTT   480
GGACTCAGAG GATTGCTGCA TTTAGAGAAT GCGAGTTATG GGATTGAACC CCTGCAGAAC   540
AGCTCTCATT TTGAGCACAT CATTTATCGA ATGGATGATG TCTACAAAGA GCCTCTGAAA   600
TGTGGAGTTT CCAACAAGGA TATAGAGAAA GAAACTGCAA AGGATGAAGA GGAAGAGCCT   660
CCCAGCATGA CTCAGCTACT TCGAAGAAGA AGAGCTGTCT TGCCACAGAC CCGGTATGTG   720
GAGCTGTTCA TTGTCGTAGA CAAGGAAAGG TATGACATGA TGGGAAGAAA TCAGACTGCT   780
GTGAGAGAAG AGATGATTCT CCTGGCAAAC TACTTGGATA GTATGTATAT TATGTTAAAT   840
ATTCGAATTG TGCTAGTTGG ACTGGAGATT TGGACCAATG GAAACCTGAT CAACATAGTT   900
GGGGGTGCTG GTGATGTGCT GGGGAACTTC GTGCAGTGGC GAGAAAAGTT TCTTATCACA   960
CGTCGGGAGA ATGACAGTGC CACAGCTAGT CTAAAGAAAG GTTTTGGTGG AACTGCAGGA  1020
ATGGCATTTG TGGGAACAGT GTGTTCAAGG AGCCACGCAG GCGGGGATTAA TGTGTTTGGA  1080
CAAATCACTG TGGAGACATT TGCTTCCATT GTTGCTCATG AATTGGGTCA TAATCTTGGA  1140
ATGAATCACG ATGATGGGAG AGATTGTTCC TGTGGGAGCAA AGAGCTGCAT CATGAATTCA  1200
GGAGCATCGG GTTCCAGAAA CTTTAGCAGT TGCAGTGCAG AGGACTTTGA GAAGTTAACT  1260
TTAAATAAAG GAGGAAACTG CCTTCTTAAT ATTCCAAAGC CTGATGAAGC CTATAGTGCT  1320
CCCTCCTGTG GTAATAAGTT GGTGGACGCT GGGGAAGAGT GTGACTGTGG TACTCCAAAG  1380
GAATGTGAAT TGGACCCTTG CTGCGAAGGA AGTACCTGTA AGCTTAAATC ATTTGCTGAG  1440
TGTGCATATG GTGACTGTTG TAAAGACTGT CGGTTCCTTC CAGGAGGTAC TTTATGCCGA  1500
GGAAAAACCA GTGAGTGTGA TGTTCCAGAG TACTGCAATG GTTCTTCTCA GTTCTGTCAG  1560
CCAGATGTTT TTATTCCAGAA TGGATATCCT TGCCAGAATA ACAAAGCCTA TTGCTACAAC  1620
GGCATGTGCC AGTATTATGA TGCTCAATGT CAAGTCATCT TTGGCTCAAA AGCCAAGGCT  1680
GCCCCCAAAG ATTGTTTCAT TGAAGTGAAT TCTAAAGGTG ACAGATTTGG CAATTGTGGT  1740
TTCTCTGGCA ATGAATACAA GAAGTGTGCC ACTGGGAATG CTTTGTGTGG AAAGCTTCAG  1800
TGTGAGAATG TACAAGAGAT ACCTGTATTT GGAATTGTGC CTGCTATTAT TCAAACGCCT  1860
AGTCGAGGCA CCAAATGTTG GGGTGTGGAT TTCCAGCTAG GATCAGATGT TCCAGATCCT  1920
GGGATGGTTA ACGAAGGCAC AAAAATGTGGT GCTGGAAAGA TCTGTAGAAA CTTCCAGTGT  1980
GTAGATGCTT CTGTTCTGAA TTATGACTGT GATGTTCAGA AAAAGTGTCA TGGACATGGG  2040
GTATGTAATA GCAATAAGAA TTGTCACTGT GAAAATGGCT GGGCTCCCCC AAATTGTGAG  2100
ACTAAAGGAT ACGGAGGAAG TGTGGACAGT GGACCTACAT ACAATGAAAT GAATACTGCA  2160
TTGAGGGACG GACTTCTGGT CTTCTTCTTC CTAATTGTTC CCCTTATTGT CTGTGCTATT  2220
TTTATCTTCA TCAAGAGGGA TCAACTGTGG AGAAGCTACT TCAGAAAGAA GAGATCACAA  2280
ACATATGAGT CAGATGGCAA AAATCAAGCA AACCCTTCTA GACAGCCGGG GAGTGTTCCT  2340
CGACATGTTT CTCCAGTGAC ACCTCCCAGA GAAGTTCCTA TATATGCAAA CAGATTTGCA  2400
GTACCAACCT ATGCAGCCAA GCAACCTCAG CAGTTCCCAT CAAGGCCACC TCCACCACAA  2460
CCGAAAGTAT CATCTCAGGG AAACTTAATT CCTGCCCGTC CTGCTCCTGC ACCTCCTTTA  2520
TATAGTTCCC TCACTTGATT TTTTTAAACCT TCTTTTTGCA AATGTCTTCA GGGAACTGAG  2580
CTAATACTTT TTTTTTTTCT TGATGTTTTC TTGAAAAGCC TTTCTGTTGC AACTATGAAT  2640
GAAAACAAAA CACCACAAAA CAGACTTCAC TAACACAGAA AAACAGAAAC TGAGTGTGAG  2700
AGTTGTGAAA TACAAGGAAA TGCAGTAAAG CCAGGGAATT TACAATAACA TTTCCGTTTC  2760
CATCATTGAA TAAGTCTTAT TCAGTCATCG GTGAGGTTAA TGCACTAATC ATGGATTTTT  2820
TGAACATGTT ATTGCAGTGA TTCTCAAATT AACTGTATTG GTGTAAGATT TTTGTCATTA  2880
AGTGTTTAAG TGTTATTCTG AATTTTCTAC CTTAGTTATC ATTAATGTAG TTCCTCATTG  2940
AACATGTGAT AATCTAATAC CTGTGAAAAC TGACTAATCA GCTGCCAATA ATATCTAATA  3000
TTTTTCATCA TGCACGAATT AATAATCATC ATACTCTAGA ATCTTGTCTG TCACTCACTA  3060
CATGAATAAG CAAATATTGT CTTCAAAAGA ATGCACAAGA ACCACAATTA AGATGTCATA  3120
TTATTTGAA AGTACAAAAT ATACTAAAAG AGTGTGTGTG TATTCACGCA GTTACTCGCT  3180
TCCATTTTTA TGACCTTTCA ACTATAGGTA ATAACTCTTA GAGAAATTAA TTTAATATTA  3240
GAATTCTAT TATGAATCAT GTGAAAGCAT CACATTCGTT CACAATAGCA CTATTTTAAA  3300
TAAATTATAA GCTTTAAGGT ACGAAGTATT TAATAGATCT AATCAAATAT GTTGATTCAT  3360
GGCTATAATA AAGCAGGAGC AATTATAAAA TCTTCAATCA ATTGAACTTT TACAAAACCA  3420
CTTGAGAATT TCATGAGCAC TTTAAAATCT GAACTTTCAA AGCTTGCTAT TAAATCATTT  3480
AGAATGTTTA CATTTACTAA GGTGTGCTGG GTCATGTAAA ATATTAGACA CTAATATTTT  3540
CATAGAAATT AGGCTGGAGA AAGAAGGAAG AAATGGTTTT CTTAAATACC TACAAAAAAG  3600
TTACTGTGGT ATCTATGAGT TATCATCTTA GCTGTGTTAA ATATGAATTT TTACTATGGC  3660
AGATATGGTA TGGATCGTAA AATTTTAAGC ACTAAAAATT TTTTCATAAC CTTTCATAAT  3720
AAAGTTTAAT AATAGGTTTA TTAACTGAAT TTCATTAGTT TTTTAAAAGT GTTTTTGGTT  3780
TGTGTATATA TACATATACA AATACAACAT TTACAATAAA TAAAATACTT GAAATTCTCA  3840
AAAAAAAAA AAAAAAAAA AAAA
```

Seq ID NO: 450 Protein sequence
Protein Accession #: NP_003807.1

```
    1         11        21        31        41        51
    |         |         |         |         |         |
MGSGARFPSG TLRVRWLLLL GLVGPVLGAA RPGFQQTSHL SSYEIITPWR LTRERREAPR    60
PYSKQVSYVI QAEGKEHIIH LERNKDLLPE DFVVYTYNKE GTLITDHPNI QNHCHYRGYV   120
EGVHNSSIAL SDCFGLRGLL HLENASYGIE PLQNSSHFEH IIYRMDDVYK EPLKCGVSNK   180
DIEKETAKDE EEEPPSMTQL LRRRRAVLPQ TRYVELFIVV DKERYDMMGR NQTAVREEMI   240
LLANYLDSMY IMLNIRIVLV GLEIWTNGNL INIVGGAGDV LGNFVQWREK FLITRRRHDS   300
AQLVLKKGFG GTAGMAFVGT VCSRSHAGGI NVFGQITVET FASIVAHELG HNLGMNHDDG   360
RDCSCGAKSC IMNSGASGSR NFSSCSAEDF EKLTLNKGGN CLLNIPKPDE AYSAPSCGNK   420
LVDAGEECDC GTPKECELDP CCEGSTCKLK SFAECAYGDC CKDCRFLPGG TLCRGKTSEC   480
DVPEYCNGSS QFCQPDVPIQ NGYPCQNNKA YCYNGMCQYY DAQCQVIFGS KAKAAPKDCF   540
IEVNSKGDRF GNCGFSGNEY KKCATGNALC GKLQCENVQE IPVFGIVPAI IQTPSRGTKC   600
WGVDFQLGSD VPDPGMVNEG TKCGAGKICR NFQCVDASVL NYDCDVQKKC HGHGVCNSNK   660
NCHCENGWAP PNCETKGYGG SVDSGPTYNE MNTALRDGLL VFFFLIVPLI VCAIFIFIKR   720
DQLWRSYFRK KRSQTYESDG KNQANPSRQP GSVPRHVSPV TPPREVPIYA NRFAVPTYAA   780
KQPQQFPSRP PPPQPKVSSQ GNLIPARPAP APPLYSSLT
```

Seq ID NO: 451 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_016650.1
Coding sequence: 196..789

```
1          11         21         31         41         51
|          |          |          |          |          |
GGTTTCAATA TATGCAGATG TCTCGATATA GGAATGAAAT TACGTCTTTG GAACAACTTA      60
AATAAGTCAA ATATACTTGG AGCTTTAAAA ATTAAAAGGA GAGAGATTCG AGCACCTTTT     120
CTGCTGCCAT GACAACCATG CAAGGAATGG AACAGGCCAT GCCAGGGTTG GCCTGGTGTG     180
CCCCAGCTGG GAAACATGGC TGTCATACAT TCACATCTGT GGAAAGGATT GCAAGAGAAG     240
TTCTTGAAGG GAGAACCCAA AGTCCTTGGG GTTGTGCAGA TTCTGACTGC CCTGATGAGC     300
CTTAGCATGG GAATAACAAT GATGTGTATG GCATCTAATA CTTATGGAAG TAACCCTATT     360
TCCGTGCATA TCGGGTACAC AATTTGGGGG TCAGTAATGT TTATTATTTC AGGATCCTTG     420
TCAATTGCAG CAGGAATTAG AACTACAAAA GGCCTGGTCC GAGGTAGTCT AGGAATGAAT     480
ATCACCAGCT CTGTACTGGC TGCATCAGGG ATCTTAATCA ACACATTTAG CTTGGCGTTT     540
TATTCATTCC ATCACCCTTA CTGTAACTAC TATGGCAACT CAAATAATTG TCATGGGACT     600
ATGTCCATCT TAATGGGTCT GGATGGCATG GTGCTCCTCT TAAGTGTGCT GGAATTCTGC     660
ATTGCTGTGT CCCTCTCTGC CTTTGGATGT AAAGTGCTCT GTTGTACCCC TGGTGGGGTT     720
GTGTTAATTC TGCCATCACA TTCTCACATG GCAGAAACAG CATCTCCCAC ACCACTTAAT     780
GAGGTTTGAG GCCAACAAAA GATCAACAGA CAAATGCTCC AGAAATCTAT GCTGACTGTG     840
ACACAAGAGC CTCACATGAG AAAATTACCAG TATCCAACTT CGATACTGAT AGACGTGTTG     900
ATATTATTAT TATATGTAAT CCAATTATGA ACTGTGTGTG TATAGAGAGA TAATAAATTC     960
AAAATTATGT TCTCATTTTT TTCCCTGGAA CTCAATAACT CACTTCACTG GCTCTTTATC    1020
GAGAGTACTA GGAGTTAAAT TAATAAATAA TGCATTTAAT GAGGCCACAG GAAAAA
```

Seq ID NO: 452 <u>Protein sequence</u>
Protein Accession #: NP_057734.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MAVIHSHLWK GLQEKFLKGE PKVLGVVQIL TALMSLSMGI TMMCMASNTY GSNPISVHIG      60
YTIWGSVMFI ISGSLSIAAG IRTTKGLVRG SLGMNITSSV LAASGILINT FSLAFYSFHH     120
PYCNYYGNSN NCHGTMSILM GLDGMVLLLS VLEFCIAVSL SAFGCKVLCC TPGGVVLILP     180
SHSHMAETAS PTPLNEV
```

Seq ID NO: 453 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_002091.1
Coding sequence: 56..503

```
1          11         21         31         41         51
|          |          |          |          |          |
AGTCTCTGCT CTTCCCAGCC TCTCCGGCGC GCTCCAAGGG CTTCCCGTCG GGACCATGCG      60
CGGCAGTGAG CTCCCGCTGG TCCTGCTGGC GCTGGTCCTC TGCCTAGCGC CCCGGGGGCG     120
AGCGGTCCCG CTGCCTGCGG GCGGAGGGAC CGTGCTGACC AAGATGTACC CGCGCGGCAA     180
CCACTGGGCG GTGGGGCACT TAATGGGGAA AAAGAGCACA GGGGAGTCTT CTTCTGTTTC     240
TGAGAGAGGG AGCCTGAAGC AGCAGCTGAG AGAGTACATC AGGTGGGAAG AAGCTGCAAG     300
GAATTTGCTG GGTCTCATAG AAGCAAAGGA GAACAGAAAC CACCAGCCAC CTCAACCCAA     360
GGCCTTGGGC AATCAGCAGC CTTCGTGGGA TTCAGAGGAT AGCAGCAACT TCAAAGATGT     420
AGGTTCAAAA GGCAAAGTTG GTAGACTCTC TGCTCCAGGT TCTCAACGTG AAGGAAGGAA     480
CCCCCAGCTG AACCAGCAAT GATAATGATG GCCTCTCTCA AAAGAGAAAA ACAAAACCCC     540
TAAGAGACTG AGTTCTGCAA GCATCAGTTC TACGGATCAT CAACAAGATT TCCTTGTGCA     600
AAATATTTGA CTATTCTGTA TCTTTCATCC TTGACTAAAT TCGTGATTTT CAAGCAGCAT     660
CTTCTGGTTT AAACTTGTTT GCTGTGAACA ATTGTCGAAA AGAGTCTTCC AATTAATGCT     720
TTTTTATATC TAGGCTACCT GTTGGTTAGA TTCAAGGCCC CGAGCTGTTA CCATTCACAA     780
TAAAAGCTTA AACACAT
```

Seq ID NO: 454 <u>Protein sequence</u>
Protein Accession #: NP_002082.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MRGSELPLVL LALVLCLAPR GRAVPLPAGG GTVLTKMYPR GNHWAVGHLM GKKSTGESSS      60
VSERGSLKQQ LREYIRWEEA ARNLLGLIEA KENRNHQPPQ PKALGNQQPS WDSEDSSNFK     120
DVGSKGKVGR LSAPGSQREG RNPQLNQQ
```

Seq ID NO: 455 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_016522.1
Coding sequence: 265..1299

```
1          11         21         31         41         51
|          |          |          |          |          |
GCGGAAGCAG CGAGGAGGGA GCCCCCTTTG GCCGTCCTCC GTGGAACCGG TTTTCCGAGG      60
CTGGCAAAAG CCGAGGCTGG ATTTGGGGGA GGAATATTAG ACTCGGAGGA GTCTGCGCGC     120
TTTTCTCCTC CCCGCGCCTC CCGGTCGCCG CGGGTTCACC GCTCAGTCCC CGCGCTCGCT     180
CCGCACCCCA CCCACTTCCT GTGCTCGCCC GGGGGGGCGTG TGCCGTGCGG CTGCCGGAGT     240
TCGGGGAAGT TGTGGCTGTC GAGAATGGGG GTCTGTGGGT ACCTGTTCCT GCCCTGGAAG     300
TGCCTCGTGG TCGTGTCTCT CAGGCTGCTG TTCCTTGTAC CCACAGGAGT GCCCGTGCGC     360
AGCGGAGATG CCACCTTCCC CAAAGCTATG GACAACGTGA CGGTCCGGCA GGGGGAGAGC     420
GCCACCCTCA GGTGCACTAT TGACAACCGG GTCACCCGGG TGGCCTGGCT AAACCGCAGC     480
ACCATCCTCT ATGCTGGGAA TGACAAGTGG TGCCTGGATC CTCGCGTGGT CCTTCTGAGC     540
AACACCCAAA CGCAGTACAG CATCCGGATC CAGAACGTGG ATGTGTATGA CGAGGGCCCT     600
TACACCTGCT CGGTGCAGAC AGACAACCAC CCAAAGACCT CTAGGGTCCA CCTCATTGTG     660
CAAGTATCTC CCAAAATTGT AGAGATTTCT TCAGATATCT CCATTAATGA AGGGAACAAT     720
ATTAGCCTCA CCTGCATAGC AACTGGTAGA CCAGAGCCTA CGGTTACTTG GAGACACATC     780
```

```
     TCTCCCAAAG CGGTTGGCTT TGTGAGTGAA GACGAATACT TGGAAATTCA GGGCATCACC    840
     CGGGAACAGT CAGGGGACTA CGAGTGCAGT GCCTCCAATG ACGTGGCCGC GCCCGTGGTA    900
     CGGAGAGTAA AGGTCACCGT GAACTATCCA CCATACATTT CAGAAGCCAA GGGTACAGGT    960
5    GTCCCCGTGG GACAAAAGGG GACACTGCAG TGTGAAGCCT CAGCAGTCCC CTCAGCAGAA   1020
     TTCCAGTGGT ACAAGGATGA CAAAAGACTG ATTGAAGGAA AGAAAGGGGT GAAAGTGGAA   1080
     AACAGACCTT TCCTCTCAAA ACTCATCTTC TTCAATGTCT CTGAACATGA CTATGGGAAC   1140
     TACACTTGCG TGGCCTCCAA CAAGCTGGGC CACACCAATG CCAGCATCAT GCTATTTGGT   1200
     CCAGGCGCCG TCAGCGAGGT GAGCAACGGC ACGTCGAGGA GGGCAGGCTG CGTCTGGCTG   1260
10   CTGCCTCTTC TGGTCTTGCA CCTGCTTCTC AAATTTTGAT GTGAGTGCCA CTTCCCCACC   1320
     CGGGAAAGGC TGCCGCCACC ACCACCACCA ACACAACAGC AATGGCAACA CCGACAGCAA   1380
     CCAATCAGAT ATATACAAAT GAAATTAGAA GAAACACAGC CTCATGGGAC AGAAATTTGA   1440
     GGGAGGGGAA CAAAGAATAC TTTGGGGGGA AAAGAGTTTT AAAAAAGAAA TTGAAAATTG   1500
     CCTTGCAGAT ATTTAGGTAC AATGGAGTTT TCTTTTCCCA AACGGGAAGA ACACAGCACA   1560
15   CCCGGCTTGG ACCCACTGCA AGCTGCATCG TGCAACCTCT TTGGTGCCAG TGTCGGGCAAG   1620
     GGCTCAGCCT CTCTGCCCAC AGACTGCCCC CACGTGGAAC ATTCTGGAGC TGGCCATCCC   1680
     AAATTCAATC AGTCCATAGA GACGAACAGA ATGAGACCTT CCGGCCCAAG CGTGGCGCTT   1740
     CCGGCCCAAG CGTGGCGCTG CGGGCACTTT GGTAGACTGT GCCACCACGG CGTGTGTTGT   1800
     GAAACGTGAA ATAAAAAGAG CAAAAAAAAA AAAAAAAA
```

Seq ID NO: 456 <u>Protein sequence</u>
Protein Accession #: NP_057606.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MGVCGYLFLP WKCLVVVSLR LLFLVPTGVP VRSGDATFPK AMDNVTVRQG ESATLRCTID    60
     NRVTRVAWLN RSTILYAGND KWCLDPRVVL LSNTQTQYSI BIQNVDVYDE GPYTCSVQTD   120
     NHPKTSRVHL IVQVSPKIVE ISSDISINEG NNISLTCIAT GRPBPTVTWR HISPKAVGFV   180
     SEDEYLEIQG ITREQSGDYE CSASNDVAAP VVRRVKVTVN YPPYISEAKG TGVPVGQKGT   240
     LQCEASAVPS AEFQWYKDDK RLIEGKKGVK VENRPFLSKL IFFNVSEHDY GNYTCVASNK   300
     LGHTNASIML FGPGAVSEVS NGTSRRAGCV WLLPLLVLHL LLKF
```

Seq ID NO: 457 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_012261.1
Coding sequence: 203..1045

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     GATTTGCTCT GCCAGCAGCT GTCGGTGCCG CGCTCGACAC CGAGTCCTAG CTAGGCGCTC    60
     ACAGAATACG CGCTCCCTCC CTCCCCCTTC TCTGTCCCCC GCCTCTCGCT CACCCCGGCC   120
     CACTCCAGCG GCGACTTTGA GGGATTCCCT CTCTGGCGGC CTCTGCAGCA GCACAGCCGG   180
     CCTCATTCGG GGCACTGCGA GTATGGATCT CCAAGGAAGA GGGGTCCCCA GCATCGACAG   240
     ACTTCGAGTT CTCCTGATGT TGTTCCATAC AATGGCTCAA ATCATGGCAG AACAAGAAGT   300
     GGAAAATCTC TCAGGCCTTT CCACTAACCC TGAAAAAGAT ATATTTGTGG TGCGGGAAAA   360
     TGGGACGACG TGTCTCATGG CAGAGTTTGC AGCCAAATTT ATTGTACCTT ATGATGTGTG   420
     GGCCAGCAAC TACGTAGATC TGATCACAGA ACAGGCCGAT ACCATGGGAG CCCAGGGAGC   480
     TGAGGTGAAG GGCCGCTGTG GCCACAGCCA GTCGGAGCTG CAAGTGTTCT GGGTGGATCG   540
     CGCATATGCA CTCAAAATGC TCTTTGTAAA GGAAAGCCAC AACATGTCCA AGGGACCTGA   600
     GGCGACTTGG AGGCTGAGCA AAGTGCAGTT TGTCTACGAC TCCTCGGAGA AAACCCACTT   660
     CAAAGACGCA GTCAGTGCTG GGAAGCACAC AGCCAACTCG CACCACCTCT CTGCCTTGGT   720
     CACCCCCGCT GGGAAGTCCT ATGAGTGTCA AGCTCAACAA ACCATTTCAC TGGCCTCTAG   780
     TGATCCGCAG AAGACGGTCA CCATGATCCT GTCTGCGGTC CACATCCAAC CTTTTGACAT   840
     TATCTCAGAT TTTGTCTTCA GTGAAGAGCA TAAATGCCCA GTGGATGAGC GGGAGCAACT   900
     GGAAGAAACC TTGCCCCTGA TTTTGGGGCT CATCTTGGGC CTCGTCATCA TGGTAACACT   960
     CGCGATTTAC CACGTCCACC ACAAAATGAC TGCCAACCAG GTGCAGATCC CTCGGGACAG   1020
     ATCCCAGTAT AAGCACATGG GCTAGAGGCC GTTAGGCAGG CACCCCCTAT TCCTGCTCCC   1080
     CCAACTGGAT CAGGTAGAAC AACAAAAGCA CTTTTCCATC TTGTACACGA GATACACCAA   1140
     CATAGCTACA ATCAAACAGG CCTGGGTATC TGAGGCTTGC TTGGCTTGTG TCCATGCTTA   1200
     AACCCACGGA AGGGGGAGAC TCTTTCGGAT TTGTAGGGTG AAATGGCAAT TATTCTCTCC   1260
     ATGCTGGGGA GGAGGGGAGG AGGGTCTCAG ACAGCTTTCG TGCTCATGGT GGCTTGGCTT   1320
     TGACTCTCCA AAGAGCAATA AATGCCACTT GGAGCTGTAT CTGGCCCCAA AGTTTAGGGA   1380
     TTGAAAACAT GCTTCTTTGA GGAGGAAACC CCTTTAGGTT CAGAAGAATA TGGGGTGCTT   1440
     TGCTCCCTTG GACACAGCTG GCTTATCCTA TACAGTTGTC AATGCACACA GAATACAACC   1500
     TCATGCTCCC TGCAGCAAGA CCCCTGAAAG TGATTCATGC TTCTGGCTGG CATTCTGCAT   1560
     GTTTAGTGAT TGTCTTGGGA ATGTTTCACT GCTACCCGCA TCCAGCGACT GCAGCACCAG   1620
     AAAACGACTA ATGTAACTAT GCAGAGTTGT TTGGACTTCT TCCTGTGCCA GGTCCAAGTC   1680
     GGGGGACCTG AAGAATCAAT CTGTGTGAGT CTGTTTTTCA AAATGAAATA AAACACACTA   1740
     TTCTCTGGC
```

Seq ID NO: 458 <u>Protein sequence</u>
Protein Accession #: NP_036393.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MDLQGRGVPS IDRLRVLLML PHTMAQIMAE QEVENLSGLS TNPEKDIFVV RENGTTCLMA    60
     EPAAKFIVPY DVWASNYVDL ITEQADIALT RGAEVKGRCG HSQSELQVFW VDRAYALKML   120
     FVKESHNMSK GPEATWRLSK VQFVYDSSEK THPKDAVSAG KHTANSHHLS ALVTPAGKSY   180
     ECQAQQTISL ASSDPQKTVT MILSAVHIQP FDIISDFVFS EEHKCPVDER EQLEETLPLI   240
     LGLILGLVIM VTLAIYHVHH KMTANQVQIP RDRSQYKHMG
```

Seq ID NO: 459 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001169.1
Coding sequence: 85..870

```
     1          11         21         31         41         51
```

```
       |            |            |            |            |            |
      TAGGAGATAA  GAGTATCTTG  CACAGCAGGT  GCAGGTTTCC  CAGCAGCTCA  GGCAAGAGTC      60
      CGATGTTTGT  GCCATCTGAT  CCTGATGTCT  GGAGAGATAG  CCATGTGTGA  GCCTGAATTT     120
      GGCAATGACA  AGGCCAGGGA  GCCGAGCGTG  GGTGGCAGGT  GGCGAGTGTC  CTGGTACGAA     180
      CGGTTTGTGC  AGCCATGTCT  GGTCGAACTG  CTGGGCTCTG  CTCTCTTCAT  CTTCATCGGG     240
      TGCCTGTCGG  TCATTGAGAA  TGGGACGGAC  ACTGGGCTGC  TGCAGCCGGC  CCTGGCCCAC     300
      GGGCTGGCTT  TGGGGCTCGT  GATTGCCACG  CTGGGGAATA  TCAGTGGTGG  ACACTTCAAC     360
      CCTGCGGTGT  CCCTGGCAGC  CATGCTGATC  GGAGGCCTCA  ACCTGGTGAT  GCTCCTCCCG     420
      TACTGGGTCT  CACAGCTGCT  CGGGGGGATG  CTCGGGGCTG .CCTTGGCCAA  GGTGGTGAGT     480
      CCTGAGGAGA  GGTTCTGGAA  TGCATCTGGG  GCGGCCTTTG  TGCAGTCCA   GGAGCAGGGG     540
      CAGGTGGCAG  GGGCGTTGGT  GGCAGAGATC  ATCCTGACGA  CGCTGCTGGC  CCTGGCTGTA     600
      TGCATGGGTG  CCATCAATGA  GAAGACAAAG  GGCCCTCTGG  CCCCGTTCTC  CATCGGCTTT     660
      GCCGTCACCG  TGGATATCCT  GGCTGGGGGC  CCTGTGTCTG  GAGGCTGCAT  GAATCCCGCC     720
      CGTGCTTTTG  GACCTGCGGT  GGTGGCCAAC  CACTGGAACT  TCCACTGGAT  CTACTGGCTG     780
      GGCCCACTCC  TGGCTGGCCT  GCTTGTTGGA  CTGCTCATTA  GGTGCTTCAT  TGGAGATGGG     840
      AAGACCCGCC  TCATCCTGAA  GGCTCGGTGA  GCAGAGCTCG  TGGGATTCCT  GCTGCTCCAG     900
      GTGTCCTCAG  CTCACCTGTC  CCAGACTGAG  GACAGGGGAG  TTCCTGCATT  TCCTGCCAGG     960
      GCAGAGGCCC  AGAGGAGCGA  CCCCCTGCTT  CCACTGCTTG  GGCCTGCTTT  CTCAGATAGA    1020
      CTGACTGCTG  AGGAGGCTCT  AGGTTCTTGG  AATTCCTTTG  TGCTCATCAG  AGACCCCAGC    1080
      CTGGGGAACA  CGCTGCCCGC  ACTGCCCAGA  GAGCAGTGCA  AACACCACAA  CACGAGCGTG    1140
      TTTCTTGAGA  GGAATGTCCC  CGAGTTGGAC  AAGGAGGCTG  TTTCTGCACA  TCAGCTCATT    1200
      TCCCGCACCC  CATTTCTTGC  TTGATTGCTT  TGTTGGGGGC  CTGGCCACTT  CCTTGCTTCT    1260
      CAAGCTGACA  ATTCTCACTT  TGCAATAAAT  AGTCCAGTGT  TTCCTTCAT
```

Seq ID NO: 460 <u>Protein sequence</u>
Protein Accession #: NP_001160.1

```
       1           11          21          31          41          51
       |           |           |           |           |           |
      MSGEIAMCEP  EFGNDKAREP  SVGGRWRVSW  YERFVQPCLV  ELLGSALFIF  IGCLSVIENG      60
      TDTGLLQPAL  AHGLALGLVI  ATLGNISGGH  FNPAVSLAAM  LIGGLNLVML  LPYWVSQLLG     120
      GMLGAALAKV  VSPEERFWNA  SGAAFVTVQE  QGQVAGALVA  EIILTTLLAL  AVCMGAINEK     180
      TKGPLAPFSI  GFAVTVDILA  GGPVSGGCMN  PARAFGPAVV  ANHWNFHWIY  WLGPLLAGLL     240
      VGLLIRCFIG  DGKTRLILKA  R
```

Seq ID NO: 461 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_003226.1
Coding sequence: 2..226

```
       1           11          21          31          41          51
       |           |           |           |           |           |
      GATGCTGGGG  CTGGTCCTGG  CCTTGCTGTC  CTCCAGCTCT  GCTGAGGAGT  ACGTGGGCCT      60
      GTCTGCAAAC  CAGTGTGCCG  TGCCGGCCAA  GGACAGGGTG  GACTGCGGCT  ACCCCCATGT     120
      CACCCCCAAG  GAGTGCAACA  ACCGGGGCTG  CTGCTTTGAC  TCCAGGATCC  CTGGAGTGCC     180
      TTGGTGTTTC  AAGCCCCTGA  CTAGGAAGAC  AGAATGCACC  TTCTGAGGCA  CCTCCAGCTG     240
      CCCCTGGGAT  GCAGGCTGAG  CACCCCTTGCC  CGGCTGTGAT  TGCTGCCAGG  CACTGTTCAT     300
      CTCAGTTTTT  CTGTCCCTTT  GCTCCCGGCA  AGCTTTCTGC  TGAAAGTTCA  TATCTGGAGC     360
      CTGATGTCTT  AACGAATAAA  GGTCCCATGC  TCCACCCG
```

Seq ID NO: 462 <u>Protein sequence</u>
Protein Accession #: NP_003217.1

```
       1           11          21          31          41          51
       |           |           |           |           |           |
      MLGLVLALLS  SSSABEYVGL  SANQCAVPAK  DRVDCGYPHV  TPKECNNRGC  CFDSRIPGVP      60
      WCFKPLTRKT  ECTF
```

Seq ID NO: 463 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_002993.1
Coding sequence: 64..408

```
       1           11          21          31          41          51
       |           |           |           |           |           |
      GGCACGAGCC  AGTCTCCGCG  CCTCCACCCA  GCTCAGGAAC  CCGCGAACCC  TCTCTTGACC      60
      ACTATGAGCC  TCCCGTCCAG  CCGCGCGGCC  CGTGTCCCGG  GTCCTTCGGG  CTCCTTGTGC     120
      GCGCTGCTCG  CGCTGCTGCT  CCTGCTGACG  CGGCCGGGGC  CCCTCGCCAG  CGCTGGTCCT     180
      GTCTCTGCTG  TGCTGACAGA  GCTGCGTTGC  ACTTGTTTAC  GCGTTACGCT  GAGAGTAAAC     240
      CCCAAAACGA  TTGGTAAACT  GCAGGTGTTC  CCCGCAGGCC  CGCAGTGCTC  CAAGGTGGAA     300
      GTGGTAGCCT  CCCTGAAGAA  CGGGAAGCAA  GTTTGTCTGG  ACCCGGAAGC  CCCTTTTCTA     360
      AAGAAAGTCA  TCCAGAAAAT  TTTGGACAGT  GGAAACAAGA  AAAACTGAGT  AACAAAAAAG     420
      ACCATGCATC  ATAAAATTGC  CCAGTCTTCA  GCGGAGCAGT  TTTCTGGAGA  TCCCTGGACC     480
      CAGTAAGAAT  AAGAAGGAAG  GGTTGGTTTT  TTTCCATTTT  CTACATGGAT  TCCCTACTTT     540
      GAAGAGTGTG  GGGGAAAGCC  TACGCTTCTC  CCTGAAGTTT  ACAGCTCAGC  TAATGAAGTA     600
      CTAATATAGT  ATTTCCACTA  TTTACTGTTA  TTTTACCTGA  TAAGTTATTG  AACCCTTTGG     660
      CAATTGACCA  TATTGTGAGC  AAAGAATCAC  TGGTTATTAG  TCTTTCAATG  AATATTGAAT     720
      TGAAGATAAC  TATTGTATTT  CTATCATACA  TTCCTTAAAG  TCTTACCGAA  AAGGCTGTGG     780
      ATTTCGTATG  GAAATAATGT  TTTATTAGTG  TGCTGTTGAG  GGAGGTATCC  TGTTGTTCTT     840
      ACTCACTCTT  CTCATAAAAT  AGGAAATATT  TTAGTTCTGT  TTTCTTGGGG  AATATGTTAC     900
      TCTTTACCCT  AGGATGCTAT  TTAAGTTGTA  CTGTATTAGA  ACACTGGGTG  TGTCATACCG     960
      TTATCTGTGC  AGAATATATT  TCCTTATTCA  GAATTTCTAA  AAATTTAAGT  TCTGTAAGGG    1020
      CTAATATATT  CTCTTCCTAT  GGTTTTAGAT  GTTTGATGTC  TTCTTAGTAT  GGCATAATGT    1080
      CATGATTTAC  TCATTAAACT  TTGATTTTGT  ATGCTATTTT  TTCACTATAG  GATGACTATA    1140
```

```
      ATTCTGGTCA CTAAATATAC ACTTTAGATA GATGAAGAAG CCCAAAAACA GATAAATTCC   1200
      TGATTGCTAA TTTACATAGA AATGTATTCT CTTGGTTTTT TAAATAAAAG CAAAATTAAC   1260
      AATGATCTGT GCTCTGCAAA GTTTTGAAAA TATATTTGAA CAATTTGAAT ATAAATTCAT   1320
      CATTTAGTCC TCAAAATATA TACAGCATTG CTAAGATTTT CAGATATCTA TTGTGGATCT   1380
 5    TTTAAAGGTT TTGACCATTT TGTTATGAGG AATTATACAT GTATCACATT CACTATATTA   1440
      AAATTGCACT TTTATTTTTT CCTGTGTGTC ATGTTGGTTT TTGGTACTTG TATTGTCATT   1500
      TGGAGAAACA ATAAAAGATT TCTAAACCAA AAAAAAAAAA AAAAAAA
```

Seq ID NO: 464 <u>Protein sequence</u>
Protein Accession #: NP_002984.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MSLPSSRAAR VPGPSGSLCA LLALLLLLTP PGPLASAGPV SAVLTELRCT CLRVTLRVNP   60
      KTIGKLQVFP AGPQCSKVEV VASLKNGKQV CLDPEAPFLK KVIQKILDSG NKKN
```

Seq ID NO: 465 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_002038.2
Coding sequence: 108..500

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      GAACCGTTTA CTCGCTGCTG TGCCCATCTA TCAGCAGGCT CCGGGCTGAA GATTGCTTCT   60
      CTTCTCTCCT CCAAGGTCTA GTGACGGAGC CCGCGCGCGG CGCCACCATG CGGCAGAAGG   120
      CGGTATCGCT TTTCTTGTGC TACCTGCTGC TCTTCACTTG CAGTGGGGTG GAGGCAGGTA   180
      AGAAAAAGTG CTCGGAGAGC TCGGACAGCG GCTCCGGGTT CTGGAAGGCC CTGACCTTCA   240
      TGGCCGTCGG AGGAGGACTC GCAGTCGCCG GGCTGCCCGC GCTGGGCTTC ACCGGCGCCG   300
      GCATCGCGGC CAACTCGGTG GCTGCCTCGC TGATGAGCTG GTCTGCGATC CTGAATGGGG   360
      GCGGCGTGCC CGCCGGGGGG CTAGTGGCCA CGCTGCAGAG CCTCGGGGCT GGTGGCAGCA   420
      GCGTCGTCAT AGGTAATATT GGTGCCCTGA TGGGCTACGC CACCCACAAG TATCTCGATA   480
      GTGAGGAGGA TGAGGAGTAG CCAGCAGCTC CCAGAACCTC TTCTTCCTTC TTGGCCTAAC   540
      TCTTCCAGTT AGGATCTAGA ACTTTGCCTT TTTTTTTTTT TTTTTTTTTT TTTGAGATGG   600
      GTTCTCACTA TATTGTCCAG GCTAGAGTGC AGTGGCTATT CACAGATGCG AACATAGTAC   660
      ACTGCAGCCT CCAACTCCTA GCCTCAAGTG ATCCTCCTGT CTCAACCTCC CAAGTAGGAT   720
      TACAAGCATG CGCCGACGAT GCCCAGAATC CAGAACTTTG TCTATCACTC TCCCCAACAA   780
      CCTAGATGTG AAAACAGAAT AAACTTCACC CAGAAAA
```

Seq ID NO: 466 <u>Protein sequence</u>
Protein Accession #: NP_002029.3

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MRQKAVSLFL CYLLLFTCSG VEAGKKKCSE SSDSGSGFWK ALTFMAVGGG LAVAGLPALG   60
      FTGAGIAANS VAASLMSWSA ILNGGGVPAG GLVATLQSLG AGGSSVVIGN IGALMGYATH   120
      KYLDSEEDEE
```

Seq ID NO: 467 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_003469.2
Coding sequence: 92..1945

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      GAAACGGCCC GAGAAGCTCG CCCGGAGAAC GGGGAGGAAT ATGCTGTGGA GCTCCTCTGC   60
      CATATAAACA AAAAGAGGAA ATCTTTCAAA CATGGCTGAA GCAAAGACCC ACTGGCTTGG   120
      AGCAGCCCTG TCTCTTATCC CTTTAATTTT CCTCATCTCT GGGGCTGAAG CAGCTTCATT   180
      TCAGAGAAAC CAGCTGCTTC AGAAAGAACC AGACCTCAGG TTGGAAAATG TCCAAAAGTT   240
      TCCCAGTCCT GAAATGATCA GGGCTTTGGA GTACATAGAA AACCTCCGAC AACAAGCTCA   300
      TAAGGAAGAA AGCAGCCCAG ATTATAATCC CTACCAAGGT GTCTCTGTCC CCCTTCAGCA   360
      AAAAGAAAAT GGCGATGAAA GCCACTTGCC CGAGAGGGAT TCACTGAGTG AAGAAGACTG   420
      GATGAGAATA ATACTCGAAG CTTTGAGACA GGCTGAAAAT GAGCCTCAGT CTGCACCAAA   480
      AGAAAATAAG CCCTATGCCT TGAATTCAGA AAAGAACTTT CCAATGGACA TGAGTGATGA   540
      TTATGAGACA CAGCAGTGGC CAGAAAGAAA GCTTAAGCAC ATGCAATTCC CTCCTATGTA   600
      TGAAGAGAAT TCCAGGGATA ACCCCTTTAA ACGCACAAAT GAAATAGTGG AGGAACAATA   660
      TACTCCTCAA AGCCTTGCTA CATTGGAATC TGTCTTCCAA GAGCTGGGGA AACTGACAGG   720
      ACCAAACAAC CAGAAACGTG AGAGGATGGA TGAGGAGCAA AAACTTTATA CGGATGATGA   780
      AGATGATATC TACAAGGCTA ATAACATTGC CTATGAAGAT GTGGTCGGGG AGAAGACTG   840
      GAACCCAGTA GAGGAGAAAA TAGAGAGTCA AACCCAGGAA GAGGTGAGAG ACAGCAAAGA   900
      GAATATAGGA AAAAATGAAC AAATCAACGA TGAGATGAAA CGCTCAGGGC AGCTTGGCAT   960
      CCAGGAAGAA GATCTTCGGA AAGAGAGTAA AGACCAACTC TCAGATGATG TCTCCAAAGT   1020
      AATTGCCTAT TTGAAAAGGT TAGTAAATGC TGCAGGAAGT GGGAGGTTAC AGAATGGGCA   1080
      AAATGGGAA AGGGCCACCA GGCTTTTTGA GAAACCTCTT GATTCTCAGT CTATTTATCA   1140
      GCTGATTGAA ATCTCAAGGA ATTTACAGAT ACCCCCAGAA GACTTAATTG AGATGCTCAA   1200
      AACTGGGGAG AAGCCGAATG GATCAGTGGA ACCGGAGCGG GAGCTTGACC TTCCTGTTGA   1260
      CCTAGATGAC ATCTCAGAGG CTGACTTAGA CCATCCAGAC CTGTTCCAAA ATAGGATGCT   1320
      CTCCAAGAGT GGCTACCCTA AAACACCTGG TCGTGCTGGG ACTGAGGCCC TACCAGACGG   1380
      GCTCAGTGTT GAGGATATTT TAAATCTTTT AGGGATGGAG AGTGCAGCAA ATCAGAAAAC   1440
      GTCGTATTTT CCCAATCCAT ATAACCAGGA GAAAGTTCTG CCAAGGCTCC CTTATGGTGC   1500
      TGGAAGATCT AGATCGAACC AGCTTCCCAA AGCTGCCTGG ATTCCACATG TTGAAAACAG   1560
      ACAGATGGCA TATGAAAACC TGAACGACAA GGATCAAGAA TTAGGTGAGT ACTTGGCCAG   1620
      GATGCTAGTT AAATACCCTG AGATCATTAA TTCAAACCAA GTGAAGCGAG TTCCTGGTCA   1680
      AGGCTCATCT GAAGATGACC TGCAGGAAGA GGAACAAATT GAGCAGGCCA TCAAAGAGCA   1740
      TTTGAATCAA GGCAGCTCTC AGGAGACTGA CAAGCTGGCC CCGGTGAGCA AAAGGTTCCC   1800
      TGTGGGGCCC CCGAAGAATG ATGATACCCC AAATAGGCAG TACTGGGATG AAGATCGTTGT   1860
      AATGAAAGTG CTGGAATACC TCAATCAAGA AAAGGCAGAA AAGGGAAGGG AGCATATTGC   1920
```

```
     TAAGAGAGCA ATGGAAAATA TGTAAGCTGC TTTCATTAAT TACCCTACTT TCATTCCTCC 1980
     CACCCCAAGC AAATCCCAAC ATTTCTCTTC AGTGTGTTGA CTTCTATCCT GTTAACACTG 2040
     TAATATCTTT AAATGATGTA CAGGCAGATG AAACCAGGTC ACTGGGGAGT CTGCTTCATT 2100
     TCCTCTGAGC TGTTATCTTG TGTATGGATA TGTGTAAATG TTATGACTCC TTGATAAAAA 2160
     ATTTATTATG TCCATTATTC AAGAAAGATA TCTATGACTG TGTTTAATAG TATATCTAAT 2220
     GGCTGTGGCA TTGTTGATGC TCACATATGA TAAAAAGTG TCCTATAATT CTATTGAAAG 2280
     TTTTTAATAT TTATTGAATT ATTTTGTTAC TGTCTGTAGC GTTTTGTGGA GTACTGGACC 2340
     AAAAAAATAA AGCATTATAA ATATA
```

Seq ID NO: 468 Protein sequence
Protein Accession #: NP_003460.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MAEAKTHWLG AALSLIPLIF LISGAEAASF QRNQLLQKEP DLRLENVQKF PSPEMIRALE   60
YIENLRQQAH KEESSPDYNP YQGVSVPLQQ KENGDESHLP ERDSLSEEDW MRIILEALRQ  120
AENEPQSAPK ENKPYALNSE KNFPMDMSDD YETQQWPERK LKHMQFPPMY EENSRDNPFK  180
RTNEIVEEQY TPQSLATLES VFQELGKLTG PNNQKRERMD EEQKLYTDDE DDIYKANNIA  240
YEDVVGGEDW NPVEEKIESQ TQEEVRDSKE NIGKNEQIND EMKRSGQLGI QEEDLRKESK  300
DQLSDDVSKV IAYLKRLVNA AGSGRLQNGQ NGERATRLPE KPLDSQSIYQ LIEISRNLQI  360
PPEDLIEMLK TGEKPNGSVE PERELDLPVD LDDISEADLD HPDLFQNRML SKSGYPKTPG  420
RAGTEALPDG LSVEDILNLL GMESAANQKT SYFPNPYNQE KVLPRLPYGA GRSRSNQLPK  480
AAWIPHVENR QMAYENLNDK DQELGEYLAR MLVKYPEIIN SNQVKRVPGQ GSSEDDLQEE  540
EQIEQAIKEH LNQGSSQETD KLAPVSKRPP VGPPKNDDTP NRQYWDEDLL MKVLEYLNQE  600
KAEKGREHIA KRAMENM
```

Seq ID NO: 469 DNA sequence
Nucleic Acid Accession #: NM_006398.1
Coding sequence: 19..516

```
1          11         21         31         41         51
|          |          |          |          |          |
GGCCCCTTGT CTGCAGAGAT GGCTCCCAAT GCTTCCTGCC TCTGTGTGCA TGTCCGTTCC   60
GAGGAATGGG ATTTAATGAC CTTTGATGCC AACCCATATG ACAGCGTGAA AAAAATCAAA  120
GAACATGTCC GGTCTAAGAC CAAGGTTCCT GTGCAGGACC AGGTTCTTTT GCTGGGCTCC  180
AAGATCTTAA AGCCACGGAG AAGCCTCTCA TCTTATGGCA TTGACAAAGA GAAGACCATC  240
CACCTTACCC TGAAAGTGGT GAAGCCCAGT GATGAGGAGC TGCCCTTGTT TCTTGTGGAG  300
TCAGGTGATG AGGCAAAGAG GCACCTCCTC CAGGTGCGAA GGTCCAGCTC AGTGGCACAA  360
GTGAAAGCAA TGATCGAGAC TAAGACGGGT ATAATCCCTG AGACCCAGAT TGTGACTTGC  420
AATGGAAAGA GACTGGAAGA TGGGAAGATG ATGGCAGATT ACGGCATCAG AAAGGGCAAC  480
TTACTCTTCC TGGCATCTTA TTGTATTGGA GGGTGACCAC CCTGGGGATG GGGTGTTGGC  540
AGGGGTCAAA AAGCTTATTT CTTTTAATCT CTTACTCAAC GAACACATCT TCTGATGATT  600
TCCCAAAATT AATGAGAATG AGATGAGTAG AGTAAGATTT GGGTGGGATG GGTAGGATGA  660
AGTATATTGC CCAACTCTAT GTTTCTTTGA TTCTAACACA ATTAATTAAG TGACATGATT  720
TTTACTAATG TATTACTGAG ACTAGTAAAT AAATTTTTAA GGCAAAATAG AGCATTC
```

Seq ID NO: 470 Protein sequence
Protein Accession #: NP_006389.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MAPNASCLCV HVRSEEWDLM TFDANPYDSV KKIKEHVRSK TKVPVQDQVL LLGSKILKPR   60
RSLSSYGIDK EKTIHLTLKV VKPSDEELPL PLVESGDBAK RHLLQVRRSS SVAQVKAMIE  120
TKTGIIPETQ IVTCNGKRLE DGKMMADYGI RKGNLLPLAS YCIGG
```

Seq ID NO: 471 DNA sequence
Nucleic Acid Accession #: XM_094741.1
Coding sequence: 1..948

```
1          11         21         31         41         51
|          |          |          |          |          |
ATGAAGGCCA ACTACAGCGC AGAGGAGCGC TTTCTCCTGC TGGGTTTCTC CGACTGGCCT   60
TCCCTGCAGC CGGTCCTCTT CGCCCTTGTC CTCCTGTGCT ACCTCCTGAC CTTGACGGGC  120
AACTCGGCGC TGGTGCTGCT GGCGGTGCGC GACCCGCGCC TGCACACGCC CATGTACTAC  180
TTCCTCTGCC ACCTGGCCTT GGTAGACGCG GGCTTCACTA CTAGCGTGGT GCCGCCGCTG  240
CTGGCCAACC TGCGCGGACC AGCGCTCTGG CTGCCGCGCA GCCACTGCAC GGCCCAGCTG  300
TGCGCATCGC TGGCTCTGGG TTCGGCCGAA TGCGTCCTCC TGGCGGTGAT GGCTCTGGAC  360
CGCGCGGCCG CAGTGTGCCG CCCGCTGCGC TATGCGGGGC TCGTCTCCCC GCGCCTATGT  420
CGCACGCTGG CCAGCGCCTC CTGGCTAAGC GGCCTCACCA ACTCGGTTGC GCAAACCGCG  480
CTCCTGGCTG AGCGGCCGCT GTGCGCGCCC CGCCTGCTGG ACCACTTCAT CTGTGAGCTG  540
CCGGCGTTGC TCAAGCTGGC CTGCGGAGGC GACGGAGACA CTACCGAGAA CCAGATGTTC  600
GCCGCCCGCG TGGTCATCCT GCTGCTGCCG TTTGCCGTCA TCCTGGCCTC CTACGGTGCC  660
GTGGGCCCGAG CTGTCTGTTG CATGCGGTTC AGCGGAGGCC GGAGGAGGGC GGTGGGCACG  720
TGTGGGTCCC ACCTGACAGC CGTCTGCCTG TTCTACGGCT CGGCCATCTA CACCTACCTG  780
CAGCCGCGCG AGCGCTACAA CCAGGCACGG GGCAAGTTCG TATCGCTCTT CTACACCGTG  840
GTCACACCTG CTCTCAACCC GCTCATCTAC ACCCTCAGGA ATAAGAAAGT GAAGGGGGCA  900
GCGAGGAGGC TGCTGCGGAG TCTGGGGAGA GGCCAGGCTG GGCAGTGA
```

Seq ID NO: 472 Protein sequence
Protein Accession #: XP_094741.1

```
1          -11        21         31         41         51
|          |          |          |          |          |
MKANYSAEER FLLLGFSDWP SLQPVLFALV LLCYLLTLTG NSALVLLAVR DPRLHTPMYY   60
```

```
      FLCHLALVDA GFTTSVVPPL LANLRGPALW LPRSHCTAQL CASLALGSAE CVLLAVMALD   120
      RAAAVCRPLR YAGLVSPRLC RTLASASWLS GLTNSVAQTA LLAERPLCAP RLLDHFICEL   180
      PALLKLACGG DGDTTENQMF AARVVILLLP FAVILASYGA VARAVCCMRF SGGRRRAVGT   240
      CGSHLTAVCL FYGSAIYTYL QPAQRYNQAR GKFVSLFYTV VTPALNPLIY TLRNKKVKGA   300
  5   ARRLLRSLGR GQAGQ
```

Seq ID NO: 473 DNA sequence
Nucleic Acid Accession #: NM_001062.1
Coding sequence: 76..1380

10

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      GCTCTCATTA CCTTCTGCCC ATCACTTAAT AAATAGCCAG CCAATTCATC AACATTCTGG    60
15    TACACTGTTG GAGAGATGAG ACAGTCACAC CAGCTGCCCC TAGTGGGGCT CTTACTGTTT   120
      TCTTTTATTC CAAGCCAACT ATGCGAGATT TGTGAGGTAA GTGAAGAAAA CTACATCCGC   180
      CTAAAACCTC TGTTGAATAC AATGATCCAG TCAAACTATA ACAGGGGAAC CAGCGCTGTC   240
      AATGTTGTGT TGTCCCTCAA ACTTGTTGGA ATCCAGATCC AAACCCTGAT GCAAAAGATG   300
      ATCCAACAAA TCAAATACAA TGTGAAAAGC AGATTGTCAG ATGTAAGCTC GGGAGAGCTT   360
20    GCCTTGATTA TACTGGCTTT GGGAGTATGT CGTAACGCTG AGGAAAACTT AATATATGAT   420
      TACCACCTGA CTGACAAGCT AGAAAATAAA TTCCAAGCAG AAATTGAAAA TATGGAAGCA   480
      CACAATGGCA CTCCCCTGAC TAACTACTAC CAGCTCAGCC TGGACGTTTT GGCCTTGTGT   540
      CTGTTCAATG GGAACTACTC AACCGCCGAA GTTGTCAACC ACTTCACTCC TGAAAATAAA   600
      AACTATTATT TTGGTAGCCA GTTCTCAGTA GATACTGGTG CAATGGCTGT CCTGGCTCTG   660
25    ACCTGTGTGA AGAAGAGTCT AATAAATGGG CAGATCAAAG CAGATGAAGG CAGTTTAAAG   720
      AACATCAGTA TTTATACAAA GTCACTGGTA GAAAAGATTC TGTCTGAGAA AAAAGAAACT   780
      GGTCTCATTG GAAACACATT TAGCACAGGA GAAGCCATGC AGGCCCTCTT TGTATCATCA   840
      GACTATTATA ATGAAAATGA CTGGAATTGC CAACAAACTC TGAATACAGT GCTCACGGAA   900
      ATTTCTCAAG GAGCATTCAG TAATCCAAAC GCTGCAGCCC AGGTCTTACC TGCCCTGATG   960
30    GGAAAGACCT TCTTGGATAT TAACAAAGAC TCTTCTTGCG TCTCTGCTTC AGGTAACTTC  1020
      AACATCTCCG CTGATGAGCC TATAACTGTG ACACCTCCTG ACTCACAATC ATATATCTCC  1080
      GTCAATTACT CTGTGAGAAT CAATGAAACA TATTTCACCA ATGTCACTGT GCTAAATGGT  1140
      TCTGTCTTCC TCAGTGTGAT GGAGAAAGCC CAGAAAATGA ATGATACTAT ATTTGGTTTC  1200
      ACAATGGAGG AGCGCTCATG GGGGCCCTAT ATCACCTGTA TTCAGGGCCT ATGTGCCAAC  1260
35    AATAATGACA GAACCTACTG GGAACTTCTG AGTGGAGGCG AACCACTGAG CCAAGGAGCT  1320
      GGTAGTTACG TTGTCCGCAA TGGAGAAAAC TTGGAGGTTC GCTGGAGCAA ATACTAATAA  1380
      GCCCAAACTT TCCTCAGCTG CATAAAATCC ATTTGCAGTG GAGTTCCATG TTTATTGTCC  1440
      TTATGCCTTC TTCTTCATTT ATCCCAGTAC GAGCAGGAGA GTTAATAACC TCCCCTTCTC  1500
      TCTCTACATG TTCAATAAAA GTTGTTGAAA GATTAAC
```

40   Seq ID NO: 474 Protein sequence
      Protein Accession #: NP_001053.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
45    MRQSHQLPLV GLLLLFSFIPS QLCEICEVSE ENYIRLKPLL NTMIQSNYNR GTSAVNVVLS    60
      LKLVGIQIQT LMQKMIQQIK YNVKSRLSDV SSGELALIIL ALGVCRNAEE NLIYDYHLTD   120
      KLENKFQAEI ENMEAHNGTP LTNYYQLSLD VLALCLFNGN YSTABVVNHF TPENKNYYFG   180
      SQFSVDTGAM AVLALTCVKK SLINGQIKAD BGSLKNISIY TKSLVEKILS EKKENGLIGN   240
      TFSTGEAMQA LFVSSDYYNE NDWNCQQTLN TVLTEISQGA FSNPNAAAQV LPALMGKTFL   300
50    DINKDSSCVS ASGNFNISAD EPITVTPPDS QSYISVNYSV RINETYFTNV TVLNGSVPLS   360
      VMEKAQKMND TIFGPTMEER SWGPYITCIQ GLCANNNDRT YWELLSGGEP LSQGAGSYVV .  420
      RNGENLEVRW SKY
```

      Seq ID NO: 475 DNA sequence
55   Nucleic Acid Accession #: NM_004852.1
      Coding sequence: 89..1546

```
      1          11         21         31         41         51
      |          |          |          |          |          |
60    GCCCCCGCCC GCCCCGGGCC CTGATGGACT GAATGAAGGC TGCCTACACC GCCTATCGAT    60
      GCCTCACCAA AGACCTAGAA CGTGCGCCAT GAACCCGGAG CTGACAATGG AAAGTCTGGG   120
      CACTTTGCAC GGCGCGCGCG GCGGCGGCAG TGGCGGGGGC GGCGGCGGGG GCGGCGGGGG   180
      CGGCGGCGGG GGCCGGGGCC ATGAGCAGGA GCTGCTGGCC AGCCCCAGCC CCCACCACGC   240
65    GCGCCGCGGC CCGCGTGGCT CGCTGCGGGG CCCTCCGCCG CCTCCAACCG CGCACCAGGA   300
      GCTGGGCACG GCGGCAGCGG CGGCAGCGGC GGCGTCGCGC TCGGCCATGG TCACCAGCAT   360
      GGCCTCGATC CTGGACGGCG GCGACTACCG GCCCGAGCTC TCCATCCCGC TGCACCACGC   420
      CATGAGCATG TCCTGCGACT CGTCTCCGCC TGGCATGGGC ATGAGCAACA CCTACACCAC   480
      GCTGACACCG CTCCAGCCGC TGCCACCCAT CTCCACCGTG TCTGACAAGT CCACCACCCC   540
70    TCACCCGCAC CACCATCCGC ACCACCACCA CCACCACCAC CACCAGCGCC TGTCCGGCAA   600
      CGTCAGCGGC AGCTTCACCC TCATGCGCGA CGAGCGCGGG CTCCCGGCCA TGAACAACCT   660
      CTACAGTCCC TACAAGGAGA TGCCCGGCAT GAGCCAGAGC CTGTCCCCGC TGGCCGCCAC   720
      GCCGCTGGGC AACGGGCTAG GCGGCCTCCA CAACGCGCAG CAGAGTCTGC CCAACTACGG   780
      TCCGCCGGGC CACGACAAAA TGCTCAGCCC CAACTTCGAC GCGCACCACA CTGCCATGCT   840
75    GACCCGCGGT GAGCAACACC TGTCCCGCGG CCTGGGCACC CCACCTGCGG CCATGATGTC   900
      GCACCTGAAC GGCCTGCACC ACCCGGGCCA CACTCAGTCT CACGGGCCGG TGCTGGCACC   960
      CAGTCGCGAG CGGCCACCCT CGTCCTCATC GGGCTCGCAG GTGGCCACGT CGGGCCCAGCT  1020
      GGAAGAAATC AACACCAAAG AGGTGGCCCA GCGCATCACA GCGGAGCTGA AGCGCTACAG  1080
      TATCCCCCAG GCGATCTTTG CGCAGAGGGT GCTGTGCCGG TCTCAGGGGA CTCTCTCCGA  1140
80    CCTGCTCCGG AATCCAAAAC CGTGGAGTAA ACTCAAATCT GCCAGGGAGA CCTTCCGCAG  1200
      GATGTGGAAG TGGCTTCAGG AGCCCGAGTT CCAGCGCATG TCCGCCTTAC GCCTGGCAGC  1260
      GTGCAAACGC AAAGAGCAAG AACCAAACAA AGACAGGAAC AATTCCCAGA AGAAGTCCCG  1320
      CCTGGTGTTC ACTGACCTCC AACGCGGAAC ACTCTTCGCC ATCTTCAAGG AGAACAAACG  1380
      CCCGTCAAAG GAGATGCAGA TCACCATTTC CCAGCAGCTG AGGTGGAGC TCACAACCGT  1440
      CAGCAACTTC TTCTGAACG CCCGGCGCCG CAGCCTGGAG AAGTGGCCAAG ACGATCTGAG  1500
```

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CACAGGGGGC TCCTCGTCCA CCTCCAGCAC GTGTACCAAA GCATGATGGA AGGACTCTCA 1560
CTTGGGCACA AGTCACCTCC AAATGAGGAC AACAGATACC AAAAGAAAAC AAAGGAAAAA 1620
GACACCGGAT TCCTAGCTGG GGCCCTTCAC TGGTG
```

Seq ID NO: 476 <u>Protein sequence</u>
Protein Accession #: NP_004843.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MNPELTMESL GTLHGARGGG SGGGGGGGGG GGGGGPGHEQ ELLASPSPHH ARRGPRGSLR  60
GPPPPPTAHQ ELGTAAAAAA AASRSAMVTS MASILDGGDY RPELSIPLHH AMSMSCDSSP 120
PGMGMSNTYT TLTPLQPLPP ISTVSDKFHH PHPHHPHHH HHHHQRLSG NVSGSFTLMR 180
DERGLPAMNN LYSPYKEMPG MSQSLSPLAA TPLGNGLGGL HNAQQSLPNY GPPGHDKMLS 240
PNFDAHHTAM LTRGEQHLSR GLGTPPAAMM SHLNGLHHPG HTQSHGPVLA PSRERPPSSS 300
SGSQVATSGQ LEEINTKEVA QRITAELKRY SIPQAIFAQR VLCRSQGTLS DLLRNPKPWS 360
KLKSGRETFR RMWKWLQEPE FQRMSALRLA ACKRKEQBPN KDRNNSQKKS RLVFTDLQRR 420
TLFAIFKENK RPSKEMQITI SQQLGLELTT VSNFFMNARR RSLEKWQDDL STGGSSSTSS 480
TCTKA
```

Seq ID NO: 477 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_013271.1
Coding sequence: 27..809

```
1          11         21         31         41         51
|          |          |          |          |          |
TCCGGAGCCA GGCTCGCTGG GGCAGCATGG CGGGGTCGCC GCTGCTCTGG GGGCCGCGGG  60
CCGGGGGCGT CGGCCTTTTG GTGCTGCTGC TGCTCGGCCT GTTTCGGCCG CCCCCCGCGC 120
TCTGCGCGCG GCCGGTAAAG GAACCCCGCG GCCTAAGCGC AGCGTCTCCG CCCTTGGCTG 180
AGACTGGCGC TCCTCGCCGC TTCCGGCGGT CAGTGCCCCG AGGTGAGGCG GCGGGGGCGG 240
TGCAGGAGCT GGCGCGGGCG CTGGCGCATC TGCTGGAGGC CGAACGTCAG GAGCGGGCGC 300
GGGCCGAGGC GCAGGAGGCT GAGGATCAGC AGGCGCGCGT CCTGGCGCAG CTGCTGCGCG 360
TCTGGGGCGC CCCCCGCAAC TCTGATCCGG CTCTGGGCCT GGACGACGAC CCCGACGCGC 420
CTGCAGCGCA GCTCGCTCGC GCTCTGCTCC GCGCCCGCCT TGACCCTGCC GCCCTAGCAG 480
CCCAGCTTGT CCCCGCGCCC GTCCCCGCCG CGGGCGCTCCG ACCCCGGGCC CCGGTCTACG 540
ACGACGGCCC CGCGGGCCCG GATGCTGAGG AGGCAGGCGA CGAGACACCC GACGTGGACC 600
CCGAGCTGTT GAGGTACTTG CTGGGACGGA TTCTTGCGGG AAGCGCGGAC TCCGAGGGGG 660
TGGCAGCCCC GCGCCGCCTC CGCCGTGCCG CCGACCACGA TGTGGGCTCT GAGCTGCCCC 720
CTGAGGGCGT GCTGGGGCGC TGCTGCGTG TGAAACGCCT AGAGACCCCG GCGGCCCCAGG 780
TGCCTGCACG CCGCCTCTTG CCACCCTGAG CACTGCCCGG ATCCCGTGCA CCCTGGGACC 840
CAGAAGTGCC CCCGCCATCC CGCCACCAGG ACTTCTCCCC GCCAGCACGT CCAGAGCAAC 900
TTACCCCGGC CAGCCAGCCC TCTCACCCGA GGATCCCTAC CCCCTGGCCC ACAATAACAT 960
GATCTGAGC
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Seq ID NO: 478 <u>Protein sequence</u>
Protein Accession #: NP_037403.1

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1          11         21         31         41         51
|          |          |          |          |          |
MAGSPLLWGP RAGGVGLLVL LLLGLFRPPP ALCARPVKEP RGLSAASPPL AETGAPRRFR  60
RSVPRGEAAG AVQELARALA HLLEAERQER ARAEAQEAED QQARVLAQLL RVWGAPRNSD 120
PALGLDDDPD APAAQLARAL LRARLDPAAL AAQLVPAPVP AAALRPRPPV YDDGPAGPDA 180
EEAGDETPDV DPELLRYLLG RILAGSADSE GVAAPRRLRR AADHDVGSBL PPEGVLGALL 240
RVKRLETPAP QVPARRLLPP
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Seq ID NO: 479 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_002214
Coding sequence: 681..2990

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CTGCCGACTT GTCTTTGCCC GCTGCTCCGC AGACGGGGCT GCAAAGCTGC AACTAATGGT 120
GTTGGCCTCC CTGCCCACCT GTGGAAGCAA CTGCGCTGAT TGATGCGCCA CAGACTTTTT 180
TCCCCTCGAC CTCGCCGGCG TACCCTCCCA CAGATCCAGC ATCACCCAGT GAATGTACAT 240
TAGGGTGGTT TCCCCCCCAG CTTCGGGCTT TGTTTGGGTT TGATTGTGTT TGGCTCTTCG 300
CTAAGCTGAT TTATGCAGCA GAAGCCCCAC CGGCTGGAGA GAAACAAAAG CTCTTTTCTT 360
TGTCCCGGAG CAGGCTGCGG AGCCCTTGCA GAGCCCTCTC TCCAGTCGCC GCCGGGCCCT 420
TGGCCGTCGA AGGAGGTGCT TCTCGCGGAG ACCGCGGGAC CCGCCGTGCC GAGCCGGGAG 480
GGCCGTAGGG GCCCTGAGAT GCCGAGCGGT GCCCGGGCCC GCTTACCTGC ACCGCTTGCT 540
CCGAGCCGCG GGGTCCGCCT GCTAGGCCTG CGGAAAACGT CCTAGCGACA CTCGCCCGCG 600
GGCCCCGAGG TCGCCCGGGA GGCCGAGCCC GCGTCCGGAA GGCAGCCAGG CGGCGGGGCGC 660
GGGGCGGGCT GTTTTGCATT ATGTGCGGCT CGGCCCTGGC TTTTTTTACC GCTGCATTTG 720
TCTGCCTGCA AAACGACCGG CGAGGTCCCG CCTCGTTCCT CTGGGCACCT TGGGTGTTTT 780
CACTTGTTCT TGGACTGGGC CAAGGTGAAG ACAATAGATG TGCATCTTCA AATGCAGCAT 840
CCTGTGCCAG GTGCCTTGCG CTGGGTCCAG AATGTGGATG GTGTGTTCAA GAGGATTTCA 900
TTTCAGGTGG ATCAAGAAGT GAACGTTGTG ATATTGTTTC CAATTTAATA AGCAAAGGCT 960
GCTCAGTTGA TTCAATAGAA TACCCATCTG TGCATGTTAT AATACCCACT GAAAATGAAA 1020
TTAATACCCA GGTGACACCA GGAGAAGTGT CTATCCAGCT GCGTCCAGGA GCCAAGCTA 1080
ATTTTATGCT GAAAGTTCAT CCTCTGAAGA AATATCCTGT GGATCTTTAT TATCTTGTTG 1140
ATGTCTCAGC ATCAATGCAC AATAATATAG AAAAATTAAA TTCCGTTGGA AACGATTTAT 1200
CTAGAAAAAT GGCATTTTTC TCCCGTGACT TTCGTCTTGG ATTTGGCTCA TACGTTGATA 1260
AAACAGTTTC ACCATACATT AGCATCCACC CCGAAAGGAT TCATAATCAA TGCAGTGACT 1320
ACAATTTAGA CTGCATGCCT CCCCATGGAT ACATCCATGT GCTGTCTTTG ACAGAGAACA 1380
TCACTGAGTT TGAGAAAGCA GTTCATAGAC AGAAGATCTC TGGAAACATA GATACACCAG 1440
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ACGTCAAATC GACAACCATG GAACACCCCT CACTAGGCCA ACTTTCAGAG AAATTAATAG 1680
ACAACAACAT TAATGTCATC TTTGCAGTTC AAGGAAAACA ATTTCATTGG TATAAGGATC 1740
TTCTACCCCT CTTGCCAGGC ACCATTGCTG GTGAAATAGA ATCAAAGGCT GCAAACCTCA 1800
ATAATTTGGT AGTGGAAGCC TATCAGAAGC TCATTTCAGA AGTGAAAGTT CAGGTGGAAA 1860
ACCAGGTACA AGGCATCTAT TTTAACATTA CCGCCATCTG TCCAGATGGG TCCAGAAAGC 1920
CAGGCATGGA AGGATGCAGA AACGTGACGA GCAATGATGA AGTTCTTTTC AATGTAACAG 1980
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ACAGAGGACC TAAAGGAAAG TGTGTAGATG AAACTTTTCT AGATTCCAAG TGTTTCCAGT 2160
GTGATGAGAA TAAATGTCAT TTTGATGAGT ATCAGTTTTC TTCTGAGAGT TGCAAGTCAC 2220
ACAAGGATCA GCCTGTTTGC AGTGGTGTGA GAGTTTGTGT TTGTGGGAAA TGTTCATGTC 2280
ACAAAATTAA GCTTGGAAAA GTGTATGGAA AATACTGTGA AAAGGATGAC TTTTTCTTGTC 2340
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GCTTCAGTGG CTGGGAAGGT GATCGATGCC AGTGCCCTTC AGCAGCAGCC CAGCACTGTG 2460
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GCACCGATCC CAGGAGCATC GGCCGCTTCT GTGAACACTG CCCCACCTGT TATACAGCCT 2580
GCAAGGAAAA CTGGAATTGT ATGCAATGCC TTCACCCTCA CAATTTGTCT CAGGCTATAC 2640
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CAGAATGTTT CTCCAGCCCA AGCTACTTGA GAATATTTTT CATCATTTTC ATAGTTACAT 2760
TCTTGATTGG GTTGCTTAAA GTCCTGATCA TTAGACAGGT GATACTACAA TGGAATAGTA 2820
ATAAAATTAA GTCCTCATCA GATTACAGAG TGTCAGCCTC AAAAAAAGGAT AAGTTGATTC 2880
TGCAAAGTGT TTGCACAAGA GCAGTCACCT ACCGACGTGA GAAGCCTGAA GAAATAAAAA 2940
TGGATATCAG CAAATTAAAT GCTCATGAAA CTTTCAGGTG CAACTTCTAA AAAAAGATTT 3000
TTAAACACTT AATGGGAAAC TGGAATTGTT AATAATTGCT CCTAAAGATT ATAATTTTAA 3060
AAGTCACAGG AGGAGACAAA TTGCTCACGG TCATGCCAGT TGCTGGTTGT ACACTCGAAC 3120
GAAGACTGAC AAGTATCCTC ATCATGATGT GACTCACATA GCTGCTGACT TTTTCAGAGA 3180
AAAATGTGTC TTACTACTGT TTGAGACTAG TGTCGTTGTA GCACTTTACT GTAATATATA 3240
ACTTATTTAG ATCAGCTAG AATGTAGATC CTCTGAAGAG CACTGATTAC ACTTTACAGG 3300
TACCTGTTAT CCCTACGCTT CCCAGAGAGA ACAATGCTGT GAGAGAGTTT AGCATTGTGT 3360
CACTACAAGG GTACAGTAAT CCCTGCACTG GACATGTGAG GAAAAAAATA ATCTGGCAAG 3420
TATATTCTAA GGTTGCCAAA CACTTCAACA GTTGGTGGTT GAATAGACAA GAACAGCTAG 3480
ATGAATAAAT GATTCGTGTT TCACTCTTTC AAGAGGTGAA CAATACAAC CTTAATCTTA 3540
AAAGATTATT GCTTTTTAAA GTGTGTAGTT TTATGCATGT GTGTTTATGG TTTGCTTATT 3600
TTTGCAAGAT GGATACTAAT TCCAGCATTC TCTCCTCTTT GCCTTTATGT TTTGTTTTCT 3660
TTTTTACAGG ATAAGTTTAT GTATGTCACA GATGACTGGA TTAATTAAGT GCTAAGTTAC 3720
TACTGCCATA AAAAACTAAT AATACAATGT CACTTTATCA GAATACTAGT TTTAAAAGCT 3780
GAATGTTAA
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Seq ID NO: 480 <u>Protein sequence</u>
Protein Accession #: NP_002205

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1          11         21         31         41         51
|          |          |          |          |          |
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LGPECGWCVQ EDPISGGSRS ERCDIVSNLI SKGCSVDSIE YPSVHVIIPT ENEINTQVTP   120
GEVSIQLRPG AEANFMLKVH PLKKYPVDLY LVDVSASMH NNIEKLNSVG NDLSRKMAFF   180
SRDFRLGFGS YVDKTVSPYI SIHPERIHNQ CSDYNLDCMP PHGYIHVLSL TENITEFEKA   240
VHRQKISGNI DTPEGGFDAM LQAAVCESHI GWRKEAKRLL LVMTDQTSHL ALDSKLAGIV   300
VPNDGNCHLK NNVYVKSTTM EHPSLGQLSE KLIDNNINVI FAVQGKQFHW YKDLLPLLPG   360
TIAGEIESKA ANLNNLVVEA YQKLISEVKV QVENQVQGIY FNITAICPDG SRKPGMEGCR   420
NVTSNDEVLP NVTVTMKKCD VTGGKNYAII KPIGFNETAK IHIHRNCSCQ CEDNRGPKGK   480
CVDETFLDSK CFQCDENKCH FDEDQFSSES CKSHKDQPVC SGRGVCVCGK CSCHKIKLGK   540
VYGKYCEKDD PSCPYHHGNL CAGHGECEAG RCQCPSGWEG DRCQCPSAAA QHCVNSKGQV   600
CSGRGTCVCG RCECTDPRSI GRFCEHCPTC YTACKENWNC MQCLHPHNLS QAILDQCKTS   660
CALMEQQHYV DQTSECFSSP SYLRIFPIIP IVTFLIGLLK VLIIRQVILQ WNSNKIKSSS   720
DYRVSASKKD KLILQSVCTR AVTYRREKPE EIKMDISKLN AHETFRCNF
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Seq ID NO: 481 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_003318.1
Coding sequence: 1..2574

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AGAGACATTA AAAATAAGTT TAAAAATGAA GACCTTACTG ATGAACTAAG CTTGAATAAA   120
ATTTCTGCTG ATACTACAGA TAACTCGGGA ACTGTTAACC AAATTATGAT GATGGCAAAC   180
AACCCAGAGG ACTGGTTGAG TTTGTTGCTC AAACTAGAGA AAAACAGTGT TCCGCTAAGT   240
GATGCTCTTT TAAATAAATT GATTGGTCGT TACAGTCAAG CAATTGAAGC GCTTCCCCCA   300
GATAAATATG GCCAAAATGA GAGTTTTGCT AGAATTCAAG TGAGATTTGC TGAATTAAAA   360
GCTATTCAAG AGCCAGATGA TGCACGTGAC TACTTTCAA TGGCCAGAGC AAACTGCAAG   420
AAATTTGCTT TTGTTCATAT ATCTTTTGCA CAATTTGAAC TGTCACAAGG TAATGTCAAA   480
AAAGTAAAC AACTTCTTCA AAAAGCTGTA GAACGTGGAG CAGTACCACT AGAAATGCTG   540
GAAATTGCCC TGCGGAATTT AAACCTCCAA AAAAAGCAAG TGCTTTCAGA GGAGGAAAAG   600
AAGAATTTAT CAGCATCTAC GGTATTAACT GCCCAAGAAT CATTTTCGG TTCACTTGGG   660
CATTTACAGA ATAGGAACAA CAGTTGTGAT TCCAGAGGAC AGACTACTAA AGCCAGGTTT   720
TTATATGGAG AGAACATGCC ACCACAAGAT GCAGAAATAG GTTACCGGAA TTCATTGAGA   780
CAAACTAACA AAACTAAACA GTCATGCCCA TTTGGAAGAG TCCCAGTTAA CCTTCTAAAT   840
AGCCCAGATT GTGATGTGAA GACAGATGAT TCAGTTGTAC CTTGTTTTAT GAAAAGACAA   900
ACCTCTAGAT CAGAATGCCG AGATTTGGTT GTGCCTGGAT CTAAACCAAG TGGAAATGAT   960
TCCTGTGAAT TAAGAAATTT AAAGTCTGTT CAAAATAGTC ATTTCAAGGA ACCTCTGGTG  1020
TCAGATGAAA AGAGTTCTGA ACTTATTATT ACTGATTCAA TAACCCTGAA GAATAAAACG  1080
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GAATCAAGTC TTCTAGCTAA ATTAGAAGAA ACTAAAGAGT ATCAAGAACC AGAGGTTCCA 1140
GAGAGTAACC AGAAACAGTG GCAATCTAAG AGAAAGTCAG AGTGTATTAA CCAGAATCCT 1200
GCTGCATCTT CAAATCACTG GCAGATTCCG GAGTTAGCCC GAAAAGTTAA TACAGAGCAG 1260
AAACATACCA CTTTTGAGCA ACCTGTCTTT TCAGTTTCAA AACAGTCACC ACCAATATCA 1320
ACATCTAAAT GGTTTGACCC AAAATCTATT TGTAAGCACAC CAAGCAGCAA TACCTTGGAT 1380
GATTACATGA GCTGTTTTAG AACTCCAGTT GTAAAGAATG ACTTTCCACC TGCTTGTCAG 1440
TTGTCAACAC CTTATGGCCA ACCTGCCTGT TTCCAGCAGC AACAGCATCA AATACTTGCC 1500
ACTCCACTTC AAAATTTACA GGTTTTAGCA TCTTCTTCAG CAAATGAATG CATTTCGGTT 1560
AAAGGAAGAA TTTATTCCAT TTTAAAGCAG ATAGGAAGTG GGGGTTCAAG CAAGGTATTT 1620
CAGGTGTTAA ATGAAAAGAA ACAGATATAT GCTATAAAAT ATGTGAACTT AGAAGAAGCA 1680
GATAACCAAA CTCTTGATAG TTACCGGAAC GAAATAGCTT ATTTGAATAA ACTACAACAA 1740
CACAGTGATA AGATCATCCG ACTTTATGAT TATGAAATCA CGGACCAGTA CATCTACATG 1800
GTAATGGAGT GTGGAAATAT TGATCTTAAT AGTTGGCTTA AAAAGAAAAA ATCCATTGAT 1860
CCATGGGAAC GCAAGAGTTA CTGGAAAAAT ATGTTAGAGG CAGTTCACAC AATCCATCAA 1920
CATGGCATTG TTCACAGTGA TCTTAAACCA GCTAACTTTC TGATAGTTGA TGGAATGCTA 1980
AAGCTAATTG ATTTTGGGAT TGCAAACCAA ATGCAACCAG ATACAACAAG TGTTGTTAAA 2040
GATTCTCAGG TTGGCACAGT TAATTATATG CCACCAGAAG CAATCAAAGA TATGTCTTCC 2100
TCCAGAGAGA ATGGGAAATC TAAGTCAAAG ATAAGCCCCA AAAGTGATGT TTGGTCCTTA 2160
GGATGTATTT TGTACTATAT GACTTACGGG AAAACACCAT TTCAGCAGAT AATTAATCAG 2220
ATTTCTAAAT TACATGCCAT AATTGATCCT AATCATGAAA TTGAATTTCC CGATATTCCA 2280
GAGAAAGATC TTCAAGATGT GTTAAAGTGT TGTTTAAAAA GGGACCCAAA ACAGAGGATA 2340
TCCATTCCTG AGCTCCTGGC TCATCCCTAT GTTCAAATTC AAACTCATCC AGTTAACCAA 2400
ATGGCCAAGG GAACCACTGA AGAAATGAAA TATGTTCTGG GCCAACTTGT TGGTCTGAAT 2460
TCTCCTAACT CCATTTTGAA AGCTGCTAAA ACTTTATATG AACACTATAG TGGTGGTGAA 2520
AGTCATAATT CTTCATCCTC CAAGACTTTT GAAAAAAAAA GGGGAAAAAA ATGA
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Seq ID NO: 482 Protein sequence
Protein Accession #: NP_003309.1

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NPEDWLSLLL KLEKNSVPLS DALLNKLIGR YSQAIEALPP DKYGQNESFA RIQVRFAELK  120
AIQEPDDARD YFQMARANCK KFAFVHISFA QPELSQGNVK KSKQLLQKAV ERGAVPLEML  180
EIALRNLNLQ KKQLLSEEEK KNLSASTVLT AQESPSGSLG HLQNRNNSCD SRGQTTKARF  240
LYGENMPPQD AEIGYRNSLR QTNKTKQSCP FGRVPVNLLN SPDCDVKTDD SVVPCFMKRQ  300
TSRSECRDLV VPGSKPSGND SCELRNLKSV QNSHFKEPLV SDEKSSELII TDSITLKNKT  360
ESSLLAKLEE TKEYQEPEVP ESNQKQWQSK RKSECINQNP AASSNHWQIP ELARKVNTEQ  420
KHTTPEQPVF SVSKQSPPIS TSKWFDPKSI CKTPSSNTLD DYMSCFRTPV VKNDFPPACQ  480
LSTPYGQPAC FQQQQHQILA TPLQNLQVLA SSSANECISV KGRIYSILKQ IGSGGSSKVF  540
QVLNEKKQIY AIKYVNLEEA DNQTLDSYRN EIAYLNKLQQ HSDKIIRLYD YEITDQYIYM  600
VMECGNIDLN SWLKKKKSID PWERKSYWKN MLEAVHTIHQ HGIVHSDLKP ANFLIVDGML  660
KLIDFGIANQ MQPDTTSVVK DSQVGTVNYM PPEAIKDMSS SRENGKSKSK ISPKSDVWSL  720
GCILYYMTYG KTPFQQIINQ ISKLHAIIDP NHEIEFPDIP EKDLQDVLKC CLKRDPKQRI  780
SIPELLAHPY VQIQTHPVNQ MAKGTTEEMK YVLGQLVGLN SPNSILKAAK TLYEHYSGGE  840
SHNSSSSKTF EKKRGKK
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Seq ID NO: 483 DNA sequence
Nucleic Acid Accession #: NM_003667.1
Coding sequence: 1..2651

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GAGCCCGACG GCAGGATGTT GCTCAGGGTG GACTGCTCCG ACCTGGGGCT CTCGGAGCTG  180
CCTTCCAACC TCAGCGTCTT CACCTCCTAC CTAGACCTCA GTATGAACAA CATCAGTCAG  240
CTGCTCCGGA ATCCCCTGCC CAGTCTCCGC TTCCTGGAGG AGTTACGTCT TGCGGGAAAC  300
GCTCTGACAT ACATTCCCAA GGGAGCATTC ACTGGCCTTT ACAGTCTTAA AGTTCTTATG  360
CTGCAGAATA ATCAGCTAAG ACACGTACCC ACAGAAGCTC TGCAGAATTT GCGAAGCCTT  420
CAATCCCTGC GTCGGATGC TAACCACATC AGCTATGTGC CCCCAAGCTG TTTCAGTGGC  480
CTGCATTCCC TGAGGCACCT GTGGCTGGAT GACAATGCGT TAACAGAAAT CCCCGTCCAG  540
GCTTTTAGAA GTTTATCGGC ATTGCAAGCC ATGACCTTGG CCCTGAACAA AATACACCAC  600
ATACCAGACT ATGCCTTTGG AAACCTCTCA AGCTTGGTAG TTCTACATCT CCATAACAAT  660
AGAATCCACT CCCTGGGAAA GAAATGCTTT GATGGGCTCC ACAGCCTAGA GACTTTAGAT  720
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GAACTACATT TCTATGACAA TCCCATCCAA TTTGTTGGGA GATCTGCTTT TCAACATTTA  840
CCTGAACTAA GAACACTGAC TCTGAATGGT GCCTCACAAA TAACTGAATT TCCTGATTTA  900
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CAAACCGTCT GCAATCAGTT ACCTAATCTC CAAGTGCTAG ATCTGTCTTA CAACCTATTA 1020
GAAGATTTAC CCAGTTTTTC AGTCTGCCAA AAGCTTCAGA AAATTGACCT AAGACATAAT 1080
GAAATCTACG AAATTAAAGT TGACACTTTC CAGCAGTTGC TTAGCCTCCG ATCGCTGAAT 1140
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ATAAAGCTGG ACCTATCGTC CAACCTCCTG TGTCTTTTC CTATAACTGG GTTACATGGT 1260
TTAACTCACT TAAAATTAAC AGGAAATCAT GCCTTACAGA GCTTGATATC ATCTGAAAAC 1320
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CCAGGCCCCT TCAAACCCTG TGAACACCTG CTTGATGGCT GGCTGATCAG AATTGGAGTG 1620
TGGACCATAG CAGTTCTGGC ACTTACTTGT AATGCTTTGG TGACTCAAC AGTTTTCAGA 1680
TCCCCTCTGT ACATTTCCCC CATTAAACTG TTAATTGGGG TCATCGCAGC AGTGAACATG 1740
CTCACGGGAG TCTCCAGTGC CGTGCTGGCT GGTGTGGATG CGTTCACTTT TGGCAGCTTT 1800
GCACGACATG GTGCCTGGTG GGAGAATGGG GTTGGTTGCC ATGTCATTGG TTTTTTGTCC 1860
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TACATGGTCG CTCTCATCTT GCTCAATTCC CTTTGCTTCC TCATGATGAC CATTGCCTAC 2160
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AAACACCCAA GCTTGATGTC AATTAACTCT GATGATGTCG AAAAACAGTC CTGTGACTCA 2520
ACTCAAGCCT TGGTAACCTT TACCCAGCTCC AGCATCACTT ATGACCTGCC TCCCAGTTCC 2580
GTGCCATCAC CAGCTTATCC AGTGACTGAG AGCTGCCATC TTTCCTCTGT GGCATTTGTC 2640
CCATGTCTTA A
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Seq ID NO: 484 <u>Protein sequence</u>
Protein Accession #: NP_003658.1

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PSNLSVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKGAF TGLYSLKVLM  120
LQNNQLRHVP TEALQNLRSL QSLRLDANHI SYVPPSCFSG LHSLRHLWLD DNALTEIPVQ  180
AFRSLSALQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RIHSLGKKCF DGLHSLETLD  240
LNYNNLDEFP TAIRTLSNLK ELHFYDNPIQ FVGRSAFQHL PELRTLTLNG ASQITEFPDL  300
TGTANLESLT LTGAQISSLP QTVCNQLPNL QVLDLSYNLL EDLPSFSVCQ KLQKIDLRHN  360
EIYEIKVDTF QQLLSLRSLN LAWNKIAIIH PNAFSTLPSL IKLDLSSNLL SSFPITGLHG  420
LTHLKLTGNH ALQSLISSEN FPELKVIEMP YAYQCCAFGV CENAYKISNQ WNKGDNSSMD  480
DLHKKDAGMF QAQDBRDLED FLLDFBEDLK ALHSVQCSPS ·PGPFKPCEHL LDGWLIRIGV  540
WTIAVLALTC NALVTSTVFR SPLYISPIKL LIGVIAAVNM LTGVSSAVLA GVDAFTFGSF  600
ARHGAWWENG VGCHVIGFLS IFASESSVFL LTLAALERGF SVKYSAKFET KAPPSSLKVI  660
ILLCALLALT MAAVPLLGGS KYGASPLCLP LPFGEPSTMG YMVALILLNS LCPLMMTIAY  720
TKLYCNLDKG DLENIWDCSM VKHIALLLFT NCILNCPVAF LSFSSLINLT FISPEVIKPI  780
LLVVVPLPAC LNPLLYILFN PHFKEDLVSL RKQTYVWTRS KHPSLMSINS DDVEKQSCDS  840
TQALVTPTSS SITYDLPPSS VPSPAYPVTE SCHLSSVAFV PCL
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Seq ID NO: 485 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_005756.1
Coding sequence: 73..3117

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CTCGCGGTCA GGATGGTTTT CTCTGTCAGG CAGTGTGGCC ATGTTGGCAG AACTGAAGAA  120
GTTTTACTGA CGTTCAAGAT ATTCCTTGTC ATCATTTGTC TTCATGTCGT TCTGGTAACA  180
TCCCTGGAAG AAGATACTGA TAATTCCAGT TTGTCACCAC CACCTGCTAA ATTATCTGTT  240
GTCAGTTTTG CCCCCTCCTC CAATGAGGTT GAAACAACAA GCCTCAATGA TGTTACTTTA  300
AGCTTACTCC CTTCAAACGA AACAGAAAAA ACTAAAATCA CTATAGTAAA AACCTTCAAT  360
GCTTCAGGCG TCAAACCCCA GAGAAATATC TGCAATTTGT CATCTATTTG CAATGACTCA  420
GCATTTTTTA GAGGTGAGAT CATGTTTCAA TATGATAAAG AAAGCACTGT TCCCCAGAAT  480
CAACATATAA CGAATGGCAC CTTAACTGGA GTCCTGTCTC TAAGTGAATT AAAACGCTCA  540
GAGCTCAACA AAACCCTGCA AACCCTAAGT GAGACTTACT TTATAAATGTG TGCTACAGCA  600
GAGGCCCAAA GCACATTAAA TTGTACATTC ACAATAAAAC TGAATAATAC AATGAATGCA  660
TGTGCTGCAA TAGCCGCTTT GGAAAGAGTA AAGATTCGAC CAATGGAACA CTGCTGCTGT  720
TCTGTCAGGA TACCCTGCCC TTCCTCCCCA GAAGAGTTGG GAAAGCTTCA GTGTGACCTG  780
CAGGATCCCA TTGTCTGTCT TGCTGACCAT CCACGTGGCC CACCATTTTC TTCCAGCCAA  840
TCCCTCCAG TGGTGCCTCG GGCCACTGTG CTTTCCCAGG TCCCCAAAGC TACCTCTTTT  900
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Protein Accession #: NP_005747.1

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     NACAVIAALE RVKIRPMEHC CCSVRIPCPS SPEELEKLQC DLQDPIVCLA DHPRGPPFSS  240
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     ENQVLQMEKA LSLGSLEPNL AGEMINQVSR LLHSPPDMLA PLAQRLLKVV DDIGLQLNFS  420
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Nucleic Acid Accession #: Eos sequence
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Seq ID NO: 488 <u>Protein sequence</u>
Protein Accession #: Eos sequence

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        RRYLCCGKLR LAENSDWSKT ATNGLKKQTV NQGVSSSSNS LQSSSNSTNS TTLLVNNDCS   900
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Seq ID NO: 489 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..2811

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Seq ID NO: 490 Protein sequence
Protein Accession #: Eos sequence

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CCCTGCCCTT CCTCCCCAGA GAGAGTTGGGA AAGCTTCAGT GTGACCTGCA GGATCCCATT  720
GTCTGTCTTG CTGACCATCC ACGTGGCCCA CCATTTTCTT CCAGCCAATC CATCCCAGTG  780
GTGCCTCGGG CCACTGTGCT TTCCCAGGTC CCCAAAGCTA CCTCTTTTGC TGAGCCTCCA  840
GATTATTCAC CTGTGACCCA CAATGTTCCC TCTCCAATAG GGGAGATTCA ACCCCTTTCA  900
CCCCAGCCTT CAGCTCCCAT AGCTTCCAGC CCTGCCATTG ACATGCCCCC ACAGTCTGAA  960
ACGATCTCTT CCCCTATGCC CCAAACCCAT GTCTCCGGCA CCCCACCTCC TGTGAAAGCC 1020
TCATTTTCCT CTCCCACCGT GTCTGCCCCT GGGAATGTCA ACACTACCAG CGCACCTCCT 1080
GTCCAGACAG ACATCGTCAA CACCAGCAGT ATTTCTGATC TTGAGAACCA AGTGTTGCAG 1140
ATGGAGAAGG CTCTGTCCTT GGGCAGCCTG GAGCCTAACC TCGGAGGAGA AATGATCAAC 1200
CAAGTCAGCA GACTCCTTCA TTCCCCGCCT GACATGCTGG CCCCTCTGGC TCAAAGATTG 1260
CTGAAAGTAG TGGATGACAT TGGCCTACAG CTGAACTTTT CAAACACGAC TATAAGTCTA 1320
ACCTCCCCTT CTTTGGCTCT GGCTGTGATC AGAGTGAATG CCAGTAGTTT CAACACAACT 1380
ACCTTTGTGG CCCAAGACCC TGCAAATCTT CAGGTTTCTC TGGAAACCCA AGCTCCTGAG 1440
AACAGTATTG GCACAATTAC TCTTCCTTCA TCGCTGATGA ATAATTTACC AGCTCATGAC 1500
ATGGAGCTAG CTTCCAGGGT TCAGTTCAAT TTTTTTGAAA CACCTGCTTT GTTTCAGGAT 1560
CCTTCCCTGG AGAACCTCTC TCTGATCAGC TACGTCATAT CATCGAGTGT TGCAAACCTG 1620
ACCGTCAGGA ACTTGACAAG AAACGTGACA GTCACATTAA AGCACATCAA CCCGAGCCAG 1680
GATGAGTTAA CAGTGAGATG TGTATTTTGG GACTTGGGCA GAAATGGTGG CAGAGGAGGC 1740
TGGTCAGACA ATGGCTGCTC TGTCAAAGAC AGGAGATTGA ATGAAACCAT CTGTACCTGT 1800
AGCCATCTAA CAAGCTTCGG CGTTCTGCTG GACCTATCTA GGACATCTGT GCTGCCTGCT 1860
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1145

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     CAAATGATGG CTCTGACGTT CATTACATAT ATTGGTTGTG GGCTTTCATC AATTTTTCTG  1920
     TCAGTGACTC TTGTAACCTA CATAGCTTTT GAAAAGATCC GGAGGGATTA CCCTTCCAAA  1980
     ATCCTCATCC AGCTGTGTGC TGCTCTGCTT CTGCTGAACC TGGTCTTCCT CCTGGACTCG  2040
     TGGATTGCTC TGTATAAGAT GCAAGGCCTC TGCATCTCAG TGGCTGTATT TCTTCATTAT  2100
 5   TTTCTCTTGG TCTCATTCAC ATGGATGGGC CTAGAAGCAT TCCATATGTA CCTGGCCCTT  2160
     GTCAAAGTAT TTAATACTTA CATCCGAAAA TACATCCTTA AATTCTGCAT TGTCGGTTGG  2220
     GGGGTACCAG CTGTGGTTGT GACCATCATC CTGACTATAT CCCCAGATAA CTATGGGCTT  2280
     GGATCCTATG GGAAATTCCC CAATGGTTCA CCGGATGACT TCTGCTGGAT CAACAACAAT  2340
     GCAGTATTCT ACATTACGGT GGTGGGATAT TTCTGTGTGA TATTTTTGCT GAACGCTCAGC  2400
10   ATGTTCATTG TGGTCCTGGT TCAGCTCTGT CGAATTAAAA AGAAGAAGCA ACTGGGAGCC  2460
     CAGCGAAAAA CCAGTATTCA AGACCTCAGG AGTATCGCTG GCCTTACATT TTTACTGGGA  2520
     ATAACTTGGG GCTTTGCCTT CTTTGCCTGG GGACCAGTTA ACGTGACCTT CATGTATCTG  2580
     TTTGCCATCT TTAATACCTT ACAAGGATTT TTCATATTCA TCTTTTACTG TGTGGCCAAA  2640
     GAAAATGTCA GGAAGCAATG GAGGCGGTAT CTTTGTTGTG GAAAGTTACG GCTGGCTGAA  2700
15   AATTCTGACT GGAGTAAAAC TGCTACTAAT GGTTTAAAGA AGCAGACTGT AAACCAAGGA  2760
     GTGTCCAGCT CTTCAAATTC CTTACAGTCA AGCAGTAACT CCACTAACTC CACCACACTG  2820
     CTAGTGAATA ATGATTGCTC AGTACACGCA AGCGGGAATG GAAATGCTTC TACAGAGAGG  2880
     AATGGGGTCT CTTTTAGTGT TCAGAATGGA GATGTGTGCC TTCACGATTT CACTGGAAAA  2940
     CAGCACATGT TTAACGAGAA GGAAGATTCC TGCAATGGGA AAGGCCGTAT GGCTCTCAGA  3000
20   AGGACTTCAA AGCGGGGAAG CTTACACTTT ATTGAGCAAA TGTGA
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Seq ID NO: 492 Protein sequence
Protein Accession #: Eos sequence

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      PSSNEVETTS LNDVTLSLLP SNETEKTKIT IVKTFNASGV KPQRNICNLS SICNDSAFFR  120
      GEIMFQYDKE STVPQNQHIT NGTLTGVLSL SELKRSELNK TLQTLSETYP IMCATAEAQS  180
      TLNCTFTIKL NNTMNACAAI AALERVKIRP MEHCCCSVRI PCPSSPEELG KLQCDLQDPI  240
      VCLADHPRGP PFSSSQSIPV VPRATVLSQV PKATSFAEPP DYSPVTHNVP SPIGEIQPLS  300
      PQPSAPIASS PAIDMPPQSE TISSSPMPQTH VSGTPPPVKA SFSSPTVSAP ANVNTTSAPP  360
      VQTDIVNTSS ISDLENQVLQ MEKALSLGSL EPNLAGEMIN QVSRLLHSPP DMLAPLAQRL  420
      LKVVDDIGLQ LNFSNTTISL TSPSLALAVI RVNASSFNTT TFVAQDPANL QVSLETQAPE  480
      NSIGTITLPS SLMNNLPAHD MELASRVQFN FFETPALFQD PSLENLSLIS YVISSSVANL  540
      TVRNLTRNVT VTLKHINPSQ DELTVRCVFW DLGRNGGRGG WSDNGCSVKD RRLNETICTC  600
      SHLTSFGVLL DLSRTSVLPA QMMALTFITY IGCGLSSIFL SVTLVTYIAF EKIRRDYPSK  660
      ILIQLCAALL LLNLVFLLDS WIALYKMQGL CISVAVFLHY FLLVSFTWMG LEAFHMYLAL  720
      VKVFNTYIRK YILKFCIVGW GVPAVVVTII LTISPDNYGL GSYGKFPNGS PDDFCWINNN  780
      AVFYITVVGY FCVIFLLNVS MFIVVLVQLC RIKKKKQLGA QRKTSIQDLR SIAGLTFLLG  840
      ITWGFAFFAW GPVNVTFMYL FAIFNTLQGF PIPIFYCVAK ENVRKQWRRY LCCGKLRLAE  900
      NSDWSKTATN GLKKQTVNQG VSSSSNSLQS SSNSTNSTTL LVNNDCSVHA SGNGNASTER  960
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Seq ID NO: 493 DNA sequence
Nucleic Acid Accession #: NM_015507
Coding sequence: 241..1902

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      CGCCCCTGCC GCGGTGCCTG GCCTCCCCTC CCAGACTGCA GGGACAGCAC CCGGTAACTG  120
      CGAGTGGAGC GGAGGACCCG AGCGGCTGAG GAGAGAGGAG GCGGCGGCTT AGCTGCTACG  180
      GGGTCCGGCC GGCGCCCTCC CGAGGGGGGC TCAGGAGGAG GAAGGAGGAC CCGTGCGAGA  240
      ATGCCTCTGC CCTGGAGCCT TGCGCTCCCG CTGCTGCTCT CCTGGGTGGC AGGTGGTTTC  300
      GGGAACGCGG CCAGTGCAAG GCATCACGGG TTGTTAGCAT CGGCACGTCA GCCTGGGGTC  360
      TGTCACTATG GAACTAAACT GGCCTGCTGC TACGGCTGGA GAAGAAACAG CAAGGGAGTC  420
      TGTGAAGCTA CATGCGAACC TGGATGTAAG TTTGGTGAGT GCGTGGGACC AAACAAATGC  480
      AGATGCTTTC CAGGATACAC CGGGAAAAACC TGCAGTCAAG ATGTGAATGA GTGTGGAATG  540
      AAACCCCGGC CATGCCAACA CAGATGTGTG AATACACACG GAAGCTACAA GTGCTTTTGC  600
      CTCAGTGGCC. ACATGCTCAT GCCAGATGCT ACGTGTGTGA ACTCTAGGAC ATGTGCCATG  660
      ATAAACTGTC AGTACAGCTG TGAAGACACA GAAGAAGGGC CACAGTGCCT GTGTCCATCC  720
      TCAGGACTCC GCCTGGCCCC AAATGGAAGA GACTGTCTAG ATATTGATGA ATGTGCCTCT  780
      GGTAAAGTCA TCTGTCCCTA CAATCGAAGA TGTGTGAACA CATTTGGAAG CTACTACTGC  840
      AAATGTCACA TTGGTTTCGA ACTGCAATAT ATCAGTGGAC GATATGACTG TATAGATATA  900
      AATAATGTA CTATGGATAG CCATACGTGC AGCCACCATG CCAATTGCTT CAATACCCAA  960
      GGGTCCTTCA AGTGTAAATG CAAGCAGGGA TATAAAGGCA ATGGACTTCG GTGTTCTGCT 1020
      ATCCCTGAAA ATTCTGTGAA GGAAGTCCTC AGAGCACCTG GTACCATCAA AGACAGAATC 1080
      AAGAAGTTGC TTGCTCACAA AAACAGCATG AAAAAGAAGG CAAAAATTAA AAATGTTACC 1140
      CCAGAACCCA CCAGGACTCC TACCCCTAAG GTGAACTTGC AGCCCTTCAA CTATGAAGAG 1200
      ATAGTTTCCA GAGGCGGGAA CTCTCATGGA GGTAAAAAAG GGAATGAAGA GAAAATGAAA 1260
      GAGGGGCTTG AGGATGAGAA AAGAGAAGAG AAAGCCCTGA AGAATGGACAT AGAGGAGCGA 1320
      AGCCTGCGAG GAGATGTGTT TTTCCCTAAG GTGAATGAAG CAGGTGAATT CGGCCTGATT 1380
      CTGGTCCAAA GGAAAGCGCT AACTTCCAAA CTGGAACATA AAGATTTAAA TATCTCGGTT 1440
      GACTGCAGCT TCAATCATGG GATCTGTGAC TGGAAACAGG ATAGAGAAGA TGATTTTGAC 1500
      TGGAATCCTG CTGATCGAGA TAATGCTATT GGCTTCTATA TGGCAGTTCC GGCCTTGGCA 1560
      GGTCACAAGA AAGACATTGG CCGATTGAAA CTTCTCCTAC CTGACCTGCA ACCCCAAAGC 1620
      AACTTCTGTT TGCTCTTTGA TTACCGGCTG GCCGGAGACA AAGTCGGGAA ACTTCGAGTG 1680
      TTTGTGAAAA ACAGTAACAA TGCCCTGGCA TGGGAGAAGA CCACAGGTGA GGATGAAAAG 1740
      TGGAAGACAG GGAAAATTCA GTTGTATCAA GGAACTGATG CTACCAAAAG CATCATTTTT 1800
      GAAGCAGAAC GTGGCAAGGG CAAAACCGGC GAAATCGCAG TGGATGGCGT CTTGCTTGTT 1860
      TCAGGCTTAT GTCCAGATAG CCTTTTATCT GTGGATGACT GAATGTTACT ATCTTTATAT 1920
      TTGACTTTGT ATGTCAGTTC CCTGGTTTTT TTGATATTGC ATCATAGGAC CTCTGGCATT 1980
      TTAGAATTAC TAGCTGAAAA ATTGTAATGT ACCAACAGAA ATATTATTGT AAGATGCCTT 2040
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1146

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     TCTTGTATAA GATATGCCAA TATTTGCTTT AAATATCATA TCACTGTATC TTCTCAGTCA 2100
     TTTCTGAATC TTTCCACATT ATATTATAAA ATATGGAAAT GTCAGTTTAT CTCCCCTCCT 2160
     CAGTATATCT GATTTGTATA AGTAAGTTGA TGAGCTTCTC TCTACAACAT TTCTAGAAAA 2220
     TAGAAAAAAA AGCACAGAGA AATGTTTAAC TGTTTGACTC TTATGATACT TCTTGGAAAC 2280
5    TATGACATCA AAGATAGACT TTTGCCTAAG TGGCTTAGCT GGGTCTTTCA TAGCCAAACT 2340
     TGTATATTTA AATTCTTTGT AATAATAATA TCCAAATCAT CAAAAAAAAA AAAAAAAA
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10   Seq ID NO: 494 <u>Protein sequence</u>
     Protein Accession #: NP_056322

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15   MPLPWSLALP LLLSWVAGGF GNAASARHHG LLASARQPGV CHYGTKLACC YGWRRNSKGV   60
     CEATCEPGCK FGECVGPNKC RCFPGYTGKT CSQDVNECGM KPRPCQHRCV NTHGSYKCFC  120
     LSGHRLMPDA TCVNSRTCAM INCQYSCEDT EEGPQCLCPS SGLRLAPNGR DCLDIDECAS  180
     GKVICPYNRR CVNTFGSYYC KCHIGFELQY ISGRYDCIDI NECTMDSHTC SHHANCFNTQ  240
     GSFKCKCKQG YKGNGLRCSA IPENSVKEVL RAPGTIKDRI KKLLAHKNSM KKKAKIKNVT  300
     PEPTRTPTPK VNLQPFNYEE IVSRGGNSHG GKKGNEEKMK EGLEDEKREE KALKNDIEER  360
     SLRGDVFFPK VNEAGEFGLI LVQRKALTSK LEHKDLNISV DCSFNHGICD WKQDREDDFD  420
     WNPADRDNAI GFYMAVPALA GHKKDIGRLK LLLPDLQPQS NFCLLFDYRL AGDKVGKLRV  480
     FVKNSNNALA WEKTTSEDEK WKTGKIQLYQ GTDATKSIIF EAERGKGKTG EIAVDGVLLV  540
     SGLCPDSLLS VDD
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25   Seq ID NO: 495 <u>DNA sequence</u>
     Nucleic Acid Accession #: NM_003506.1
     Coding sequence: 259..2379

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     TTAGACGGGG ACGGGAAGGG ACAGCGGCCT TCGACCGCCC CCGAGTAAT TGACCCAGGA  120
     CTCATTTTCA GGAAAGCCTG AAAATGAGTA AAATAGTGAA ATGAGGAATT TGAACATTTT  180
     ATCTTTGGAT GGGGATCTTC TGAGGATGCA AAGAGTGATT CATCCAAGCC ATGTGGTAAA  240
35   ATCAGGAATT TGAAGAAAAT GGAGATGTTT ACATTTTTGT TGACGTGTAT TTTTCTACCC  300
     CTCCTAAGAG GGCACAGTCT CTTCACCTGT GAACCAATTA CTGTTCCCAG ATGTATGAAA  360
     ATGGCCTACA ACATGACGTT TTTCCCTAAT CTGATGGGTC ATTATGACCA GAGTATTGCC  420
     GCGGTGGAAA TGGAGCATTT TCTTCCTCTC GCAAATCTGG AATGTTCACC AAACATTGAA  480
     ACTTTCCTCT GCAAAGCATT TGTACCAACC TGCATAGAAC AAAATTCATG TGGTTCCACCT  540
40   TGTCGTAAAC TTTGTGAGAA AGTATATTCT GATTGCAAAA AATTAATTGA CACTTTTGGG  600
     ATCCGATGGC CTGAGGAGCT TGAATGTGAC AGATTACAAT ATCTGATGA GACTGTTCCT  660
     GTAACTTTTG ATCCACACAC AGAATTTCTT GGTCCTCAGA AGAAAACAGA ACAAGTCCAA  720
     AGAGACATTG GATTTTGGTG TCCAAGGCAT CTTAAGACTT CTGGGGGACA AGGATATAAG  780
     TTTCTGGGAA TTGACCAGTG TGCGCCTCCA TGCCCCAACA TGTATTTTAA AAGTGATGAG  840
45   CTAGAGTTTG CAAAAAGTTT TATTGGAACA GTTTCAATAT TTTGTCTTTG TGCAACTCTG  900
     TTCACATTCC TTACTTTTTT AATTGATGTT AGAAGATTCA GATACCCAGA GAGACCAATT  960
     ATATATTACT CTGTCTGTTA CAGCATTGTA TCTCTTATGT ACTTCATTGG ATTTTTGCTG 1020
     GGCGATAGCA CAGCCTGCAA TAAGGCCGAT GAGAAGCTAG AACTTGGTGA CACTGTTGTC 1080
     CTAGGCTCTC AAAATAAGGC TTGCACCGTT TTGTTCATGC TTTTGTATTT TTCACAATG 1140
50   GCTGGCACTG TGTGGTGGGT GATTCTTACC ATTACTTGGT TCTTAGCTGC AGGAAGAAAA 1200
     TGGAGTTGTG AAGCCATCGA GCAAAAAGCA GTGTGGTTTC ATGCTGTTGC ATGGGGAACA 1260
     CCAGGTTTCC TGACTGTTAT GCTTCTTGCT CTGAACAAAG TTGAAGGAGA CAACATTAGT 1320
     GGAGTTTGCT TTGTTGGCCT TTATGACCTG GATGCTTCTC GCTACTTTGT ACTCTTGCCA 1380
     CTGTGCCTTT GTGTGTTTGT TGGGCTCTCT CTTCTTTTAG CTGGCATTAT TTCCTTAAAT 1440
55   CATGTTCGAC AAGTCATACA ACATGATGGC CGGAACCAAG AAAAACTAAA GAAATTTATG 1500
     ATTCGAATTG GAGTCTTCAG CGGCTTGTAT CTTGTGCCAT TAGTGACACT TCTCGGATGT 1560
     TACGTCTATG AGCAAGTGAA CAGGATTACC TGGGAGATAA CTTGGGTCTC TGATCATTGT 1620
     CGTCAGTACC ATATCCCATG TCCTTATCAG GCAAAAGCAA AAGCTCGACC AGAATTGGCT 1680
     TTATTTATGA TAAAATACCT GATGACATTA ATTGTTGGCA TCTCTGCTGT CTTCTGGGTT 1740
60   GGAAGCAAAA AGACATGCAA AGAATGGGCT GGGTTTTTA AACGAAATCG CAAGAGAGAT 1800
     CCAATCAGTG AAAGTCGAAG AGTACTACAG GAATCATGTG AGTTTTTCTT AAAGCACAAT 1860
     TCTAAAGTTA AACACAAAAA GAAGCACTAT AAACCAAGTT CACACAAGCT GAAGGTCATT 1920
     TCCAAATCCA TGGGAACCAG CACAGGAGCT ACAGCAAATC ATGGCACTTC TGCAGTAGCA 1980
     ATTACTAGCC ATGATTACCT AGGACAAGAA ACTTTGACAG AAATCCAAAC CTCACCAGAA 2040
65   ACATCAATGA GAGAGGTGAA AGCGGACGGA GCTAGCACCC CCAGGTTAAG AGAACAGGAC 2100
     TGTGGTGAAC CTGCCTCGCC AGCAGCATCC ATCTCCAGAC TCTCTGGGGA ACAGGTCGAC 2160
     GGGAAGGGCC AGGCAGGCAG TGTATCTGAA AGTGCGCGGA GTGAAGGAAG GATTAGTCCA 2220
     AAGAGTGATA TTACTGACAC TGGCCTGGCA CAGAGCAACA ATTTGCAGGT CCCCAGTTCT 2280
     TCAGAACCAA GCAGCCTCAA AGGTTCCACA TCTCTGCTTG TTCACCCAGT TTCAGGAGTG 2340
70   AGAAAAGAGC AGGGAGGTGG TTGTCATTCA GATACTTGAA GAACATTTTC TCTCGTTACT 2400
     CAGAAGCAAA TTTGTGTTAC ACTGGAAGTG ACCTATGCAC TGTTTTGTAA GAATCACTGT 2460
     TACGTTCTTC TTTTGCACTT AAAGTTGCAT TGCCTACTGT TATACTGGAA AAAATAGAGT 2520
     TCAAGAATAA TATGACTCAT TTCACACAAA GGTTAATGAC CTGAAAACAG 2580
     AAATGTGCAG GTTAATAATA TTTTTTTAAT AGTGTGGGAG GACAGAGTTA GAGGAATCTT 2640
75   CCTTTTCTAT TTATGAAGAT TCTACTCTTG GTAAGAGTAT TTTAAGATGT ACTATGCTAT 2700
     TTTACCTTTT TGATATAAAA TCAAGATATT TCTTTGCTGA AGTATTTAAA TCTTATCCTT 2760
     GTATCTTTTT ATACATATTT GAAAATAAGC TTATATGTAT TTGAACTTTT TTGAAATCCT 2820
     ATTCAAGTAT TTTTATCATG CTATTGTGAT ATTTTAGCAC TTTGGTAGCT TTTACACTGA 2880
     ATTTCTAAGA AAATTGTAAA ATAGTCTTCT TTTATACTGT AAAAAAAGAT ATACCAAAAA 2940
80   GTCTTATAAT AGGAATTTAA CTTTAAAAAC CCACTTATTG ATACCTTACC ATCTAAAATG 3000
     TGTGATTTTT ATAGTCTCGT TTTAGGAATT TCACAGATCC AAATTATGTA ACTGAAATAA 3060
     GGTGCTTACT CAAAGAGTGT CCACTATTGA TTGTATTATG CTGCTCACTG ATCCTTCTGC 3120
     ATATTTAAAA TAAAATGTCC TAAAGGGTTA GTAGACAAAA TGTTAGTCATT TTGTATATTA 3180
     GGCCAAGTGC AATTGACTTC CCTTTTTTAA TGTTTCATGA CCACCCATTG ATTGTATTAT 3240
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AACCACTTAC AGTTGCTTAT ATTTTTTGTT TTAACTTTTG TTTCTTAACA TTTAGAATAT 3300
TACATTTTGT ATTATACAGT ACCTTTCTCA GACATTTTGT AG
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Seq ID NO: 496 <u>Protein sequence</u>
Protein Accession #: NP_003497.1

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FLPLANLECS PNIETFLCKA FVPTCIEQIH VVPPCRKLCE KVYSDCKKLI DTFGIRWPEE  120
LECDRLQYCD ETVPVTFDPH TEFLGPQKKT EQVQRDIGFW CPRHLKTSGG QGYKFLGIDQ  180
CAPPCPNMYF KSDELEFAKS FIGTVSIFCL CATLPTFLTF LIDVRRFRYP ERPIIYYSVC  240
YSIVSLMYFI GPLLGDSTAC NKADEKLELG DTVVLGSQNK ACTVLFMLLY FFTMAGTVWW  300
VILTITWFLA AGRKWSCEAI EQKAVWFHAV AWGTPGFLTV MLLALNKVEG DNISGVCFVG  360
LYDLDASRYF VLLPLCLCVF VGLSLLLAGI ISLNHVRQVI QHDGRNQEKL KKFMIRIGVF  420
SGLYLVPLVT LLGCYVYEQV NRITWEITWV SDHCRQYHIP CPYQAKAKAR PELALFMIKY  480
LMTLIVGISA VFWVGSKKTC TEWAGFFKRN RKRDPISESR RVLQESCEFF LKHNSKVKHK  540
KKHYKPSSHK LKVISKSMGT STGATANHGT SAVAITSHDY LGQETLTEIQ TSPETSMREV  600
KADGASTPRL REQDCGEPAS PAASISRLSG EQVDGKGQAG SVSESARSEG RISPKSDITD  660
TGLAQSNNLQ VPSSSEPSSL KGSTSLLVHP VSGVRKEQGG GCHSDT
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Seq ID NO: 497 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_005046
Coding sequence: 16..777

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TGTGCAAGAG GCTCCCACCC ATGGCAGGTG GCCCTGCTCA GTGGCAATCA GCTCCACTGC  180
GGAGGCGTCC TGGTCAATGA GCGCTGGGTG CTCACTGCCG CCCACTGCAA GATGAATGAG  240
TACACCGTGC ACCTGGGCAG TGATACGCTG GGCGACAGGA GAGCTCAGAG GATCAAGGCC  300
TCGAAGTCAT TCCGGCCACC CGGCTACTCC ACACAGACCC ATGTTAATGA CCTCATGCTC  360
GTGAAGCTCA ATAGCCAGGC CAGGCTGTCA TCCATGGTGA AAAAGTCAG GCTGCCCTCC  420
CGCTGCGAAC CCCCTGGAAC CACCTGTACT GTCTCCGGCT GGGGCACTAC CACGAGCCCA  480
GATGTGACCT TTCCCTCTGA CCTCATGTGC GTGGATGTCA AGCTCATCTC CCCCCAGGAC  540
TGCACGAAGG TTTACAAGGA CTTACTGGAA AATTCCATGC TGTGCGCTGG CATCCCCGAC  600
TCCAAGAAAA ACGCCTGCAA TGGTGACTCA GGGGGACCGT TGGTGTGCAG AGGTACCCTG  660
CAAGGTCTGG TGTCCTGGGG AACTTTCCCT TGCGGCCAAC CCAATGACCC AGGAGTCTAC  720
ACTCAAGTGT GCAAGTTCAC CAAGTGGATA AATGACACCA TGAAAAAGCA TCGCTAACGC  780
CACACTGAGT TAATTAACTG TGTGCTTCCA ACAGAAAATG ACAGGAGTG AGGACGCCGA  840
TGACCTATGA AGTCAAATTT GACTTTACCT TTCCTCAAAG ATATATTTAA ACCTCATGCC  900
CTGTTGATAA ACCAATCAAA TTGGTAAAGA CCTAAAACCA AAACAAATAA AGAAACACAA  960
AACCCTCAA
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Seq ID NO: 498 <u>Protein sequence</u>
Protein Accession #: NP_005037

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MARSLLLPLQ ILLLSLALET AGEEAQGDKI IDGAPCARGS HPWQVALLSG NQLHCGGVLV   60
NERWVLTAAH CKMNEYTVHL GSDTLGDRRA QRIKASKSFR HPGYSTQTHV NDLMLVKLNS  120
QARLSSMVKK VRLPSRCEPP GTTCTVSGWG TTTSPDVTFP SDLMCVDVKL ISPQDCTKVY  180
KDLLENSMLC AGIPDSKKNA CNGDSGGPLV CRGTLQGLVS WGTFPCGQPN DPGVYTQVCK  240
FTKWINDTMK KHR
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Seq ID NO: 499 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_007196
Coding sequence: 182..962

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GATTCCCAGT TAAAAGGCTC CAGAATCGTG TACCAGGCAG AGAACTGAAG TACTGGGGCC  120
TCCTCCACTG GGTCCGAATC AGTAGGTGAC CCCGCCCCTG GATTCTGGAA GACCTCACCA  180
TGGGACGCCC CCGACCTCGT GCGGCCAAGA CGTGGATGTT CCTGCTCTTG CTGGGGGGAG  240
CCTGGGCAGG ACACTCCAGG GCACAGGAGG ACAAGGTGCT GGGGGGTCAT GAGTGCCAAC  300
CCCATTCGCA GCCTTGGCAG GCGGCCTTGT TCCAGGGCCA GCAACTACTC TGTGGCGGTG  360
TCCTTGTAGG TGGCAACTGG GTCCTTACAG CTGCCCACTG TAAAAAACCG AAATACACAG  420
TACGCCTGGG AGACCACAGC CTACAGAATA AAGATGGCCC AGAGCAAGAA ATACCTGTGG  480
TTCAGTCCAT CCCACACCCC TGCTACAACA GCAGCGATGT GGAGGACCAC AACCATGATC  540
TGATGCTTCT TCAACTGCGT GACCAGGCAT CCCTGGGGTC CAAAGTGAAG CCCATCAGCC  600
TGGCAGATCA TTGCACCCAG CCTGGCCAGA AGTGCACCGT CTCAGGCTGG GGCACTGTCA  660
CCAGTCCCCG AGAGAATTTT CCTGACACTC TCAACTGTGC AGAAGTAAAA ATCTTTCCCC  720
AGAAGAAGTG TGAGGATGCT TACCCGGGGC AGATCACAGA TGGCATGGTC TGTGCAGGCA  780
GCAGCAAAGG GGCTGACACG TGCCAGGGCG ATTCTGGAGG CCCCCTGGTG TGTGATGGTG  840
CACTCCAGGG CATCACATCC TGGGGCTCGA ACCCCTGTGG GAGGTCCGAC AAACCTGGCG  900
TCTATACCAA CATCTGCCGC TACCTGGACT GGATCAAGAA GATCATAGGC AGCAAGGGCT  960
GATTCTAGGA TAAGCACTAG ATCTCCCTTA ATAAACTCAC AACTCTC
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Seq ID NO: 500 <u>Protein sequence</u>
Protein Accession #: NP_009127

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1          11         21         31         41         51
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        MGRPRPRAAK TWMPLLLLGG AWAGHSRAQE DKVLGGHECQ PHSQPWQAAL FQGQQLLCGG   60
        VLVGGNWVLT AAHCKKPKYT VRLGDHSLQN KDGPEQEIPV VQSIPHPCYN SSDVEDHNHD  120
        LMLLQLRDQA SLGSKVKPIS LADHCTQPGQ KCTVSGWGTV TSPRENFPDT LNCAEVKIFP  180
5       QKKCEDAYPG QITDGMVCAG SSKGADTCQG DSGGPLVCDG ALQGITSWGS DPCGRSDKPG  240
        VYTNICRYLD WIKKIIGSKG
```

Seq ID NO: 501 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_006103
10   Coding sequence: 29..406

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        1          11         21         31         41         51
        |          |          |          |          |          |
15      CACCTGCACC CCGCCCGGGC ATAGCACCAT GCCTGCTTGT CGCCTAGGCC CGCTAGCCGC   60
        CGCCCTCCTC CTCAGCCTGC TGCTGTTCGG CTTCACCCTA GTCTCAGGCA CAGGAGCAGA  120
        GAAGACTGGC GTGTGCCCCG AGCTCCAGGC TGACCAGAAC TGCACGCAAG AGTGCGTCTC  180
        GGACAGCGAA TGCGCCGACA ACCTCAAGTG CTGCAGCGCG GGCTGTGCCA CCTTCTGCCT  240
        TCTCTGCCCA AATGATAAGG AGGGTTCCTG CCCCCAGGTG AACATTAACT TTCCCCAGCT  300
20      CGGCCTCTGT CGGGACCAGT GCCAGGTGGA CAGCCAGTGT CCTGGCCAGA TGAAATGCTG  360
        CCGCAATGGC TGTGGGAAGG TGTCCTGTGT CACTCCCAAT TTCTGAGGTC CAGCCACCAC  420
        CAGGCTGAGC AGTGAGGAGA GAAAGTTTCT GCCTGGCCCT GCATCTGGTT CCAGCCCACC  480
        TGCCCTCCCC TTTTTCGGGA CTCTGTATTC CCTCTTGGGC TGACCACAGC TTCTCCCTTT  540
        CCCAACCAAT AAAGTAACCA CTTTCAGCAA AAAAAAAAAA AAAA
```

25   Seq ID NO: 502 <u>Protein sequence</u>
Protein Accession #: NP_006094

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        1          11         21         31         41         51
        |          |          |          |          |          |
30      MPACRLGPLA AALLLSLLLF GFTLVSGTGA EKTGVCPELQ ADQNCTQECV SDSECADNLK   60
        CCSAGCATFC LLCPNDKEGS CPQVNINFPQ LGLCRDQCQV DSQCPGQMKC CRNGCGKVSC  120
        VTPNF
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Seq ID NO: 503 <u>DNA sequence</u>
35   Nucleic Acid Accession #: NM_002407
Coding sequence: 65..352

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        1          11         21         31         41         51
        |          |          |          |          |          |
40      CCTCCACAGC AACTTCCTTG ATCCCTGCCA CGCACGACTG AACACAGACA GCAGCCGCCT   60
        CGCCATGAAG CTGCTGATGG TCCTCATGCT GGCGGCCCTC CTCCTGCACT GCTATGCAGA  120
        TTCTGGCTGC AAAACTCCTGG AGGACATGGT TGAAAAGACC ATCAATTCCG ACATATCTAT  180
        ACCTGAATAC AAAGAGCTTC TTCAAGAGTT CATAGACAGT GATGCCGCTG CAGAGGCTAT  240
        GGGGAAATTC AAGCAGTGTT TCCTCAACCA GTCACATAGA ACTCTGAAAA ACTTTGGATT  300
45      GATGATGCAT ACAGTGTACG ACAGCATTTG GTGTAATATG AAGAGTAATT AACTTTACCC  360
        AAGGCGTTTG GCTCGAGGGG CTACAGACTA TGGCCAGAAC TCATCTGTTG ATTGCTAGAA  420
        ACCACTTTTC TTTCTTGTGT TGTCTTTTTA TGTGGAAACT GCTAGACAAC TGTTGAAACC  480
        TCAAATTCAT TTCCATTTCA ATAACTAACT GCAAATC
```

50   Seq ID NO: 504 <u>Protein sequence</u>
Protein Accession #: NP_002398

```
        1          11         21         31         41         51
        |          |          |          |          |          |
55      MKLLMVLMLA ALLLHCYADS GCKLLEDMVE KTINSDISIP EYKELLQBFI DSDAAAEAMG   60
        KPKQCFLNQS HRTLKNFGLM MHTVYDSIWC NMKSN
```

Seq ID NO: 505 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_014791.1
60   Coding sequence: 171..2126

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        1          11         21         31         41         51
        |          |          |          |          |          |
        TTGGCGGGCG GAAGCGGCCA CAACCCGGCG ATCGAAAAGA TTCTTAGGAA CGCCGTACCA   60
65      GCCGCGTCTC TCAGGACAGC AGGCCCCTGT CCTTCTGTCG GGCGCGGCTC AGCCGTGCCC  120
        TCCGCCCCTC AGGTTCTTTT TCTAATTCCA AATAAACTTG CAAGAGGACT ATGAAAGATT  180
        ATGATGAACT TCTCAAATAT TATGAATTAC ATGAAACTAT TGGGACAGGT GGCTTTGCAA  240
        AGGTCAAACT TGCCTGCCAT ATCCTTACTG GAGAGATGGT AGCTATAAAA ATCATGGATA  300
        AAAACACACT AGGGAGTGAT TTGCCCCGGA TCAAAACGGA GATTGAGGCC TTGAAGAACC  360
70      TGAGACATCA GCATATATGT CAACTCTACC ATGTGCTAGA GACAGCCAAC AAAATATTCA  420
        TGGTTCTTGA GTACTGCCCT GGAGGAGAGC TGTTTGACTA TATAATTTCC CAGGATCGCC  480
        TGTCAGAAGA GGAGACCCGG GTTGTCTTCC GTCAGATAGT ATCTGCTGTT GCTTATGTGC  540
        ACAGCCAGGG CTATGCTCAC AGGGACCTCT AGCCAGAAAA TTTGCTGTTT GATGAATATC  600
        ATAAATTAAA GCTGATTGAC TTTGGTCTCT GTGCAAACC CAAGGGTAAC AAGGATTACC  660
        ATCTACGAC ATGCTGTGGG AGTCTGGCTT ATGCAGCACC TGAGTTAATA CAAGGCAAAT  720
75      CATATCTTGG ATCAGAGGCA GATGTTTGGA GCATGGGCAT CATGTTTATAT GTTCTTATGT  780
        GTGGATTTCT ACCATTTGAT GATGATAATG TAATGGCTTT ATACAAGAAG ATTATGAGAG  840
        GAAAATATGA TGTTCCCAAG TGGCTCTCTC CCAGTAGCAT TCTGCTTCTT CAACAAATGC  900
        TGCAGGTGGA CCCAAAGAAA CGGATTCTA TGAAAAATCT ATTGAACCAT CCCTGGATCA  960
        TGCAAGATTA CAACTATCCT GTTGAGTGGC AAAGCAAGAA TCCTTTTATT CACCTCGATG  1020
80      ATGATTGCGT AACAGAACTT TCTGTACATC ACAGAAACAA CAGGCAAACA ATGGAGGATT  1080
        TAATTTCACT GTGGCAGTAT GATCACCTCA CGGCTACCTA TCTTCTGCTT CTAGCCAAGA  1140
        AGGCTCGGGG AAAACCAGTT CGTTTAAGGC TTTCTTCTTT CTCCTGTGGA CAAGCCAGTG  1200
        CTACCCCATT CACAGACATC AAGTCAAATA ATTGGAGTCT GGAAGATGTG ACCGCAAGTG  1260
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1149

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        ATAAAAATTA TGTGGCGGGA TTAATAGACT ATGATTGGTG TGAAGATGAT TTATCAACAG    1320
        GTGCTGCTAC TCCCCGAACA TCACAGTTTA CCAAGTACTG GACAGAATCA AATGGGGTGG    1380
        AATCTAAATC ATTAACTCCA GCCTTATGCA GAACACCTGC AAATAAATTA AAGAACAAAG    1440
        AAAATGTATA TACTCCTAAG TCTGCTGTAA AGAATGAAGA GTACTTTATG TTTCCTGAGC    1500
        CAAAGACTCC AGTTAATAAG AACCAGCATA AGAGAGAAAT ACTCACTACG CCAAATCGTT    1560
        ACACTACACC CTCAAAAGCT AGAAACCAGT GCCTGAAAGA AACTCCAATT AAAATACCAG    1620
        TAAATTCAAC AGGAACAGAC AAGTTAATGA CAGGTGTCAT TAGCCCTGAG AGGCGGTGCC    1680
        GCTCAGTGGA ATTGGATCTC AACCAAGCAC ATATGGAGGA GACTCCAAAA AGAAAGGGAG    1740
        CCAAAGTGTT TGGGAGCCTT GAAAGGGGGT TGGATAAGGT TATCACTGTG CTCACCAGGA    1800
        GCAAAAGGAA GGGTTCTGCC AGAGACGGGC CCAGAAGACT AAAGCTTCAC TATAATGTGA    1860
        CTACAACTAG ATTAGTGAAT CCAGATCAAC TGTTGAATGA AATAATGTCT ATTCTTCCAA    1920
        AGAAGCATGT TGACTTTGTA CAAAAGGGTT ATACACTGAA GTGTCAAACA CAGTCAGATT    1980
        TTGGGAAAGT GACAATGCAA TTTGAATTAG AAGTGTGCCA GCTTCAAAAA CCCGATGTGG    2040
        TGGGTATCAG GAGGCAGCGG CTTAAGGGCG ATGCCTGGGT TTACAAAAGA TTAGTGGAAG    2100
        ACATCCTATC TAGCTGCAAG GTATAATTGA TGGATTCTTC CATCCTGCCG GATGAGTGTG    2160
        GGTGTGATAC AGCCTACATA AAGACTGTTA TGATCGCTTT GATTTTAAAG TTCATTGGAA    2220
        CTACCAACTT GTTTCTAAAG AGCTATCTTA AGACCAATAT CTCTTTGTTT TTAAACAAAA    2280
        GATATTATTT TGTGTATGAA TCTAAATCAA GCCCATCTGT CATTATGTTA CTGTCTTTTT    2340
        TAATCATGTG GTTTTGTATA TTAATAATTG TTGACTTTCT TAGATTCACT TCCATATGTG    2400
        AATGTAAGCT CTTAACTATG TCTCTTTGTA ATGTGTAATT TCTTTCTGAA ATAAAACCAT    2460
        TTGTGAATAT
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Seq ID NO: 506 Protein sequence
Protein Accession #: NP_055606.1

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1          11         21         31         41         51
|          |          |          |          |          | .
MKDYDELLKY YELHETIGTG GFAKVKLACH ILTGEMVAIK IMDKNTLGSD LPRIKTEIEA    60
LKNLRHQHIC QLYHVLETAN KIFMVLEYCP GGELFDYIIS QDRLSEEETR VVFRQIVSAV   120
AYVHSQGYAH RDLKPENLLF DEYHKLKLID FGLCAKPKGN KDYHLQTCCG SLAYAAPELI   180
QGKSYLGSEA DVWSMGILLY VLMCGFLPFD DDNVMALYKK IMRGKYDVPK WLSPSSILLL   240
QQMLQVDPKK RISMKNLLNH PWIMQDYNYP VEWQSKNPFI HLDDDCVTEL SVHHRNNRQT   300
MEDLISLWQY DHLTATYLLL LAKKARGKPV RLRLSSFSCG QASATPFTDI KSNNWSLEDV   360
TASDKNYVAG LIDYDWCEDD LSTGAATPRT SQFTKYWTES NGVESKSLTP ALCRTPANKL   420
KNKENVYTPK SAVKNEEYFM FPEPKTPVNK NQHKREILTT PNRYTTPSKA RNQCLKETPI   480
KIPVNSTGTD KLMTGVISPE RRCRSVELDL NQAHMEETPK RKGAKVFGSL ERGLDKVITV   540
LTRSKRKGSA RDGPRRLKLH YNVTTTRLVN PDQLLNEIMS ILPKKHVDFV QKGYTLKCQT   600
QSDFGKVTMQ FELEVCQLQK PDVVGIRRQR LKGDAWVYKR LVEDILSSCK V
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Seq ID NO: 507 DNA sequence
Nucleic Acid Accession #: NM_000582
Coding sequence: 88..990

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1          11         21         31         41         51
|          |          |          |          |          |
GCAGAGCACA GCATCGTCGG GACCAGACTC GTCTCAGGCC AGTTGCAGCC TTCTCAGCCA    60
AACGCCGACC AAGGAAAACT CACTACCATG AGAATTGCAG TGATTTGCTT TTGCCTCCTA   120
GGCATCACCT GTGCCATACC AGTTAAACAG GCTGATTCTG GAAGTTCTGA GGAAAAGCAG   180
CTTTACAACA AATACCCAGA TGCTGTGGCC ACATGGCTAA ACCCTGACCC ATCTCAGAAG   240
CAGAATCTCC TAGCCCCACA GACCCTTCCA AGTAAGTCCA ACGAAAGCCA TGACATCATG   300
GATGATATGG ATGATGAAGA TGATGATGAC CATGTGGACA GCCAGGACTC CATTGACTCG   360
AACGACTCTG ATGATGTAGA TGACACTGAT GATTCTCACC AGTCTGATGA GTCTCACCAT   420
TCTGATGAAT CTGATGAACT GGTCACTGAT TTTCCCACGG ACCTGCCAGC AACGGAAGTT   480
TTCACTCCAG TTGTCCCCAC AGTAGACACA TATGATGGCC GAGGTGATAG TGTGGTTTAT   540
GGACTGAGGT CAAAATCTAA GAAGTTTCGC AGACCTGACA TCCAGTACCC TGATGCTACA   600
GACGAGGACA TCACCTCACA CATGGAAAGC GAGGAGTTGA ATGGTGCATA CAAGGCCATC   660
CCCGTTGCCC AGGACCTGAA CGCGCCTTCT GATTGGGACA GCCGTGGGAA GGACAGTTAT   720
GAAACGAGTC AGCTGGATGA CCAGAGTGCT GAAACCCACA GCCACAAGCA GTCCAGATTA   780
TATAAGCGGA AAGCCAATGA TGAGAGCAAT GAGCATTCCG ATGTGATTGA TAGTCAGGAA   840
CTTTCCAAAG TCAGCCGTGA ATTCCACAGC TTCAGCCATG AGGACATGCT GGTTGTAGAC   900
GTTGTAGACC CCAAAAGTAA GGAAGAAGAT AAACACCTGA AATTTCGTAT TTCTCATGAA   960
TTAGATAGTG CATCTTCTGA GGTCAATTAA AAGGAGAAAA AATACAATTT CTCACTTTGC   1020
ATTTAGTCAA AAGAAAAAAT GCTTTATAGC AAAATGAAAG AGAACATGAA ATGCTTCTTT   1080
CTCAGTTTAT TGGTTGAATG TGTATCTATT TGAGTCTGGA AATAACTAAT GTGTTTGATA   1140
ATTAGTTTAG TTTGTGGCTT CATGGAAACT CCCTGTAAAC TAAAAGCTTC AGGGGTTATGT   1200
CTATGTTCAT TCTATAGAAG AAATGCAAAC TATCACTGTA TTTTAATATT TGTTATTCTC   1260
TCATGAATAG AAATTTATGT AGAAGCAAAC AAAATACTTT TACCCACTTA AAAAGAGAAT   1320
ATAACATTTT ATGTCACTAT AATCTTTTGT TTTTTAAGTT AGTGTATATT TTGTTGTGAT   1380
TATCTTTTTG TGGTGTGAAT AAAATCTTTTA TCTTGAATGT AATAAGAATT TGGTGGTGTC   1440
AATTGCTTAT TTGTTTTCCC ACGGTTGTCC AGCAATTAAT AAAACATAAC CTTTTTTACT   1500
GCCTAAAAAA AAAAAAAAAA AAAA
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Seq ID NO: 508 Protein sequence
Protein Accession #: NP_000573

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1          11         21         31         41         51
|          |          |          |          |          |
MRIAVICFCL LGITCAIPVK QADSGSSEEK QLYNKYPDAV ATWLNPDPSQ KQNLLAPQTL    60
PSKSNESHDH MDDMDDEDDD DHVDSQDSID SNDSDDVDDT DDSHQSDESH HSDESDELVT   120
DFPTDLPATE VFTPVVPTVD TYDGRGDSVV YGLRSKSKKF RRPDIQYPDA TDEDITSHME   180
SEELNGAYKA IPVAQDLNAP SDWDSRGKDS YETSQLDDQS AETHSHKQSR LYKRKANDES   240
NEHSDVIDSQ ELSKVSREFH SHEFHSHEDM LVVDPKSKEE DKHLKFRISH ELDSASSEVN
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1150

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Seq ID NO:  509 DNA sequence
Nucleic Acid Accession #:  AB051390.1
Coding sequence: 34..2457
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        1          11         21         31         41         51
        |          |          |          |          |          |
      AGCGGCCGCG GCACAAAGTT GGGGGCCGCG AAGATGAGGC TGTCCCCGGC GCCCCTGAAG    60
      CTGAGCCGGA CTCCGGCACT GCTGGCCCTG GCGCTGCCCC TGGCCGCGGC GCTGGCCTTC   120
      TCCGACGAGA CCCTGGACAA AGTGCCCAAG TCAGAGGGCT ACTGCAGCCG TATCCTGCGC   180
      GCCCAGGGCA CGCGGCGCGA GGGCTACACC GAGTTCAGCC TCCGCGTGGA GGGCGACCCC   240
      GACTTCTACA AGCCGGGAAC CAGCTACCGC GTAACACTTT CAGCTGCTCC TCCCTCCTAC   300
      TTCAGAGGAT TCACATTAAT TGCCCTCAGA GAGAACAGAG AGGGTGATAA GGAAGAAGAC   360
      CATGCTGGGA CCTTCCAGAT CATAGACGAA GAAGAAACTC AGTTTATGAG CAATTGCCCT   420
      GTTGCAGTCA CTGAAAGCAC TCCACGGAGG AGGACCCGGA TCCAGGTGTT TTGGATAGCA   480
      CCACCAGCGG GAACAGGCTG CGTGATTCTG AAGGCCAGCA TCGTACAAAA ACGCATTATT   540
      TATTTTCAAG ATGAGGGCTC TCTGACCAAG AAACTTTGTG AACAAGATTC CACATTTGAT   600
      GGGGTGACTG ACAAACCCAT CTTAGACTGC TGTGCCTGCG GAACTGCCAA GTACAGACTC   660
      ACATTTTATG GGAATTGGTC CGAGAAGACA CACCCAAAGG ATTACCCTCG TCGGGCCAAC   720
      CACTGGTCTG CGATCATCGG AGGATCCCAC TCCAAGAATT ATGTACTGTG GGAATATGGA   780
      GGATATGCCA GCGAAGGCGT CAAACAAGTT GCAGAATTGG GCTCACCCGT GAAAATGGAG   840
      GAAGAAATTC GACAACAGAG TGATGAGGTC CTCACCGTCA TCAAAGCCAA AGCCCAATGG   900
      CCAGCCTGGC AGCCTCTCAA CGTGAGAGCA GCACCTTCAG CTGAATTTTC CGTGGACAGA   960
      ACGCGCCATT TAATGTCCTT CCTGACCATG ATGGGCCCTA GTCCCGACTG GAACGTAGGC  1020
      TTATCTGCAG AAGATCTGTG CACCCAAGGA AGTGGCTGGG TCCAGAAGGT GGTGCAAGAC  1080
      CTGATTCCCT GGGACGCTGG CACCGACAGC GGGGTGACCT ATGAGTCACC CAACAAACCC  1140
      ACCATTCCCC AGGAGAAAAT CCGGCCCCTG ACCAGCCTGG ACCATCCTCA GAGTCCTTTC  1200
      TATGACCCAG AGGGTGGGTC CATCACTCAA GTAGCCAGAG TTGTCATCGA GAGAATCGCA  1260
      CGGAAGGGTG AACAATGCAA TATTGTACCT GACAATGTCG ATGATATTGT AGCTGACCTG  1320
      GCTCCAGAAG AGAAAGATGA AGATGACACC CCTGAAACCT GCATCTACTC CAACTGGTCC  1380
      CCATGGTCCG CCTGCAGCTC CTCCACCTGT GACAAAGGCA AGAGGATGCG CACAGCGCATG  1440
      CTGAAAGCAC AGCTGGACCT CAGCGTCCCC TGCCCTGACA CCCAGGACTT CCAGCCCTGC  1500
      ATGGGCCCTG GCTGCAGTGA CGAAGACGGC TCCACCTGCA CCATGTCCGA GTGGATCACC  1560
      TGGTCGCCCT GCAGCATCTC CTGCGGCATG GGCATGAGGT CCCGGGAGAG GTATGTGAAG  1620
      CAGTTCCCGG AGGACGGCTC CGTGTGCACG CTGCCCACTG AGGAAACGGA GAAGTGCACG  1680
      GTCAACGAGG AGTGCTCTCC CAGCAGCTGC CTGATGACCG AGTGGGGCGA GTGGGACGAG  1740
      TGCAGCGCCA CCTGCGGCAT GGGCATGAAG AAGCGGCACC GCATGATCAA GATGAACCCC  1800
      GCAGATGGCT CCATGTGCAA AGCCGAGACA TCACAGGCAG AGAAGTGCAT GATGCCAGAG  1860
      TGCCACACCA TCCCATGCTT GCTGTCCCCA TGGTCCGAGT GGAGTGACTG CAGCGTGACC  1920
      TGCGGGAAGG GCATGCGAAC CCGACAGCGG ATGCTCAAGT CTCTGGCAGA ACTTGGAGAC  1980
      TGCAATGAGG ATCTGGAGCA GGTGGAGAAG TGCATGCTCC CTGAATGCCC CATTGACTGT  2040
      GAGCTCACCG AGTGGTCCCA GTGGTCGGAA TGTAACAAGT CATGTGGGAA AGGCCACGTG  2100
      ATTCGAACCC GGATGATCCA AATGGAGCCT CAGTTTCGAA CACCCCTG CCCAGAGACT  2160
      GTGCAGCGAA AAAAGTGCCG CATCCGAAAA TGCCTTCGAA ATCCATCCAT CCAAAAGCTA  2220
      CGCTGGAGGG AGGCCCGAGA GAGCCGGCGG AGTGAGCAGC TGAAGGAAGA GTCTGAAGGG  2280
      GAGCAGTTCC CAGGTTGTAG GATGCGCCCA TGGACGGCCT GGTCAGAATG CACCAAACTG  2340
      TGCGGAGGTG GAATTCAGGA ACGTTACATG ACTGTAAAGA AGAGATTCAA AAGCTCCCAG  2400
      TTTACCAGCT GCAAAGACAA GAAGGAGATC AGAGCATGCA ATGTTCATCC TTGTTAGCAA  2460
      GGGTACGAGT TCCCCAGGGG TGCACTCTAG ATTCCAGAGT CACCAATGGC TGGATTATTT  2520
      GCTTGTTTAA GACAATTTAA ATTGTGTACG CTAGTTTTCA TTTTTGCAGT GTGGTTCGCC  2580
      CAGTAGTCTT GTGGATGCCA GAGACATCCT TTCTGAATAC TTCTTGATGG GTACAGGCTG  2640
      AGTGGGGCGC CCTCACCTCC AGCCAGCCTC TTCCTGCAGA GGAGTAGTGT CAGCCACCTT  2700
      GTACTAAGCT GAAACATGTC CCTCTGGAGC TTCCACCTGG CCAGGGAGGA CGGAGACTTT  2760
      GACCTACTCC ACATGGAGAG GCAACCATGT CTGGAAGTGA CTATGCCTGA GTCCCAGGGT  2820
      GCGGCAGGTA GGAAACATTC ACAGATGAAG ACAGCAGATT CCCCACATTC TCATCTTTGG  2880
      CCTGTTCAAT GAAACCATTG TTTGCCCATC TCTTCTTAGT GGAACTTTAG GTCTCTTTTC  2940
      AAGTCTCCTC AGTCATCAAT AGTTCCTGGG GAAAAACAGA GCTGGTAGAC TTGAAGAGGA  3000
      GCATTGATGT TGGGTGGCTT TTGTTCTTTC ACTGAGAAAT TCGGAATACA TTTGTCTCAC  3060
      CCCTGATATT GGTTCCTGAT GCCCCCCCAA CAAAAATAAA TAAATAAATT ATGGCTGCTT  3120
      TATTTAARTA TAAGGTAGCT AGTTTTTACA CCTGAGATAA ATAATAAGCT TAGAGTGTAT  3180
      TTTTCCCPTG CTTTTGGGGG TTCAGAGGAG TATGTACAAT TCTTCTGGGA AGCCAGCCTT  3240
      CTGAACTTTT TGGTACTAAA TCCTTATTGG AACCAAGACA AAGGAAGCAA AATTGGTCTC  3300
      TTTAGAGACC AATTTGCCTA AATTTTAAAA TCTTCCTACA CACATCTAGA CGTTCAAGTT  3360
      TGCAAATCAG TTTTTAGCAA GAAAACATTT TTGCTATACA AACATTTTGC TAAGTCTGCC  3420
      CAAAGCCCCC CCAATGCATT CCTTCAACAA AATACAATCT CTGTACTTTA AAGTTATTTT  3480
      AGTCATGAAA TTTTATATGC AGAGAGAAAA AGTTACCGAG ACAGAAAACA AATCTAAGGG  3540
      AAAGGAATAT TATGGGATTA AGCTGAGCAA GCAATTCTGG TGGAAAGTCA AACCTGTCAG  3600
      TGCTCCACAC CAGGGCTGTG GTCCTCCCAG ACATGCATAG GAATGGCCAC AGGGTTACAC  3660
      TGCCTTCCCA GCAATTATAA GCACACCAGA TTCAGGGAGA CTGACCACCA AGGGATAGTG  3720
      TAAAAGGACA TTTTCTCAGT TGGGTCCATC AGCAGTTTTT CTTCCTGCAT TTATTGTTGA  3780
      AAACTATTGT TTCATTTCTT CTTTTATAGG CCTTATTACT GCTTAATCCA AATGTGTACT  3840
      ATTGGTGAGA CACATACAAT GCTCTGAATA CACTACGAAT TTGTATTAAA CACATCAGAA  3900
      TATTTCCAAA TACAACATAG TATAGTCCTG AATATGTACT TTTAACACAA GAGAGACTAT  3960
      TCAATAAAAA CTCACTGGGT CTTTCATGTC TTTAAGCTAA GTAAGTGTTC AGAAGGTTCT  4020
      TTTTTATATT GTCCTCCACC TCCATCATTT TCAATAAAAG ATAGGGCTTT TGCTCCCTTG  4080
      TTCTTGGAGG GACCATTATT ACATCTCTGA ACTACCTTTG TATCCAACAT GTTTTAAATC  4140
      CTTAAATGAA TTGCTTTCTC CCAAAAAAAG CACAATATAA AGAAACACAA GATTTAATTA  4200
      TTTTTCTACT TGGGGGGAAA AAAGTCCTCA TGTAGAAGCA CCCACTTTTG CAATGTTGTT  4260
      CTAAGCTATC TATCTAACTC TCAGCCCATG ATAAAGTTCC TTAAGCTGGT GATTCCTAAT  4320
      CAAGGACAAG CCACCCTAGT GTCTCATGTT TGTATTTGGT CCCAGTTGGG TACATTTTAA  4380
      AATCCTGATT TTGGAGACTT AAAACCAGGT TAATGGCTAA GAATGGGTAA CATGACTCTT  4440
      GTTGGATTGT TATTTTTTGT TTGCAATGGG GAATTTATAA GAAGCATCAA GTCTCTTTCT  4500
      TACCCAAAGTC TTGTTAGGTG GTTTATAGTT CTTTTGGCTA ACAAATCATT TTGGAAATAA  4560
      AGATTTTTTA CTACAAAAAT G
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1151

Seq ID NO: 510 Protein sequence
Protein Accession #: BAB18461.1

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        1         11        21        31        41        51
        |         |         |         |         |         |
       MRLSPAPLKL SRTPALLALA LPLAAALAFS DETLDKVPKS EGYCSRILRA QGTRREGYTE   60
       FSLRVEGDPD FYKPGTSYRV TLSAAPPSYF RGFTLIALRE NREGDKEEDH AGTFQIIDEE  120
       ETQFMSNCPV AVTESTPRRR TRIQVFWIAP PAGTGCVILK ASIVQKRIIY FQDEGSLTKK  180
       LCEQDSTFDG VTDKPILDCC ACGTAKYRLT FYGNWSEKTH PKDYPRRANH WSAIIGGSHS  240
       KNYVLWEYGG YASEGVKQVA ELGSPVKMEE EIRQQSDEVL TVIKAKAQWP AWQPLNVRAA  300
       PSAEFSVDRT RHLMSFLTMM GPSPDWNVGL SAEDLCTKEC GWVQKVVQDL IPWDAGTDSG  360
       VTYESPNKPT IPQEKIRPLT SLDHPQSPFY DPEGGSITQV ARVVIERIAR KGEQCNIVPD  420
       NVDDIVADLA PEEKDEDDTP ETCIYSNWSP WSACSSSTCD KGKRMRQRML KAQLDLSVPC  480
       PDTQDFQPCM GPGCSDEDGS TCTMSEWITW SPCSISCGMG MRSRERYVKQ FPEDGSVCTL  540
       PTEETBKCTV NEECSPSSCL MTEWGEWDEC SATCGMGMKK RHRMIKMNPA DGSMCKAETS  600
       QAEKCMMPEC HTIPCLLSPW SEWSDCSVTC GKGMRTRQRM LKSLAELGDC NEDLEQVEKC  660
       MLPECPIDCE LTEWSQWSEC NKSCGKGHVI RTRMIQMEPQ FGGAPCPETV QRKKCRIRKC  720
       LRNPSIQKLR WREARESRRS EQLKEESEGE QFPGCRMRPW TAWSECTKLC GGGIQERYMT  780
       VKKRFKSSQF TSCKDKKEIR ACNVHPC
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Seq ID NO: 511 DNA sequence
Nucleic Acid Accession #: NM_003108.1
Coding sequence: 76..1401

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        1         11        21        31        41        51
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       GGGGTGGGAG GGGGAGGGGG ACCTCCGCAC GAGACCCAGC GGCCCGGGTT GGAGCGTCCA   60
       GCCCTGCAAC GGATCATGGT GCAGCAGGCG GAGAGCTTGG AAGCGGAGAG CAACCTGCCC  120
       CGGGAGGCGC TGGACACGGA GGAGGGCGAA TTCATGGCTT GCAGCCCGGT GGCCCTGGAC  180
       GAGAGCGACC CAGACTGGTG CAAGACGGCG TCGGGCCACA TCAAGCGGCC GATGAACGCG  240
       TTCATGGTAT GGTCCAAGAT CGAACGCAGG AAGATCATGG AGCAGTCTCC GGACATGCAC  300
       AACGCCGAGA TCTCCAAGAG GCTGGGCAAG CGCTGGAAAA TGCTGAAGGA CAGCGAGAAG  360
       ATCCCGGTTCA TCCGGGAGGC GGAGCGGCTG CGGCTCAAGC ACATGGCCGA CTACCCCGAC  420
       TACAAGTACC GGCCCCGGAA AAAGCCCAAA ATGGACCCCT CGGCCAAGCC CAGCGCCAGC  480
       CAGAGCCCAG AGAAGAGCGC GGCCGGCCGC GGCGGCGGGA GCGCGGGCGG AGGCGCGGGC  540
       GGTGCCAAGA CCTCCAAGGG CTCCAGCAAG AAATGCGGCA AGCTCAAGGC CCCCGCGGCC  600
       GCGGGCGCCA AGGCGGGCGC GGGCAAGGCG CCCCAGTCCG GGACTACGG GGGCGCGGGC  660
       GACGACTACG TGCTGGGCAG CCTGCGCGTG AGCGGCTCGG CGGCGGCGG CGCGGGCAAG  720
       ACGGTCAAGT GCGTGTTTCT GGATGAGGAC GACGACGACG ACGACGACGA CGACGAGCTG  780
       CAGCTGCAGA TCAAACAGGA GCCGGACGAG GAGGACGAGG AACCACCGCA CCAGCAGCTC  840
       CTGCAGCCGC CGGGGCAGCA GCCGTCGCAG CTGCTGAGAC GCTACAACGT CGGCCAAAGTG  900
       CCCGCCAGCC CTACGCTGAG CAGCTCGGCG GAGTCCCCCG AGGGAGCGAG CCTCTACGAC  960
       GAGGTGCGGG CCGGCGCGAC CTCGGGCGCC GGGGGCGGGCA GCCGCCTCTA CTACAGCTTC 1020
       AAGAACATCA CCAAGCAGCA CCCCGCCGCG CTCGCGCAGC CGGCGCTGTC GCCCGCGTCC 1080
       TCGCGCTCGG TGTCCACCTC CTCGTCCAGC AGCAGCGGCA GCAGCAGCGG CAGCAGCGGC 1140
       GAGGACGCCG ACGACCTGAT GTTCGACCTG AGCTTGAATT TCTCTCAAAG CGCGCACAGC 1200
       GCCAGCGAGC AGCAGCTGGG GGGCGGCGCG GCGGCCGGGA ACCTGTCCCT GTCGCTGGTG 1260
       GATAAGGATT TGGATTCGTT CAGCGAGGGC AGCCTGGGCT CCCACTTCGA GTTCCCCGAC 1320
       TACTGCACGC CGGAGCTGAG CGAGATGATC GCGGGGGACT GGCTGGAGGC GAACTTCTCC 1380
       GACCTGGTGT TCACATATTG AAAGGCGCCC GCTGCTCGCT CTTTCTCTCG GAGGGTGCAG 1440
       AGCTGGGTTC CTTGGGAGGA AGTTGTAGTG GTGATGATGA TGATGATGAT AATGATGATG 1500
       ATGATGGTGG TGTTGATGGT GGCGGTGGTA GGGTGGAGGG GAGAGAAGAA GATGCTGATG 1560
       ATATTGATAA GATGTCGTGA CGCAAAGAAA TTGGAAAACA TGATGAAAAT TTTGGTGGAG 1620
       TTAAAGTGAA ATGAGTAGTT TTTAAACATT TTTCCTGTCC TTTTTTTGTC CCCCCTCCCT 1680
       TCCTTTATCG TGTCTCAAGG TAGTTGCATA CCTAGTCTGG AGTTGTGATT ATTTTCCCAA 1740
       AAAATGTGTT TTTGTAATTA CTATTTCTTT TTCCTGAAAT TCGTGATTGC AACAAAGGCA 1800
       GAGGGGGCGG CGCGGCGGAG GGGAGGTAGG ACCCGCTCCG GAAGGCGCTG TTTGAAGCTT 1860
       GTCGGTCTTT GAAGTCTGGA AGACGTCTGC AGAGGACCCT TTTGGCAGCA CAACTGTTAC 1920
       TCTAGGGAGT TGGTGGAGAT ATTTTTTTTT CTTAAGAGAA CTTAAAGAAC TGGTGATTTT 1980
       TTTTTAACAA AAAAAGGG
```

Seq ID NO: 512 Protein sequence
Protein Accession #: NP_003099.1

```
        1         11        21        31        41        51
        |         |         |         |         |         |
       MVQQAESLEA ESNLPREALD TEEGEFMACS PVALDESDPD WCKTASGHIK RPMNAFMVWS   60
       KIERRKIMEQ SPDMHNAEIS KRLGKRWKML KDSEKIPFIR EAERLRLKHM ADYPDYKYRP  120
       RKKPKMDPSA KPSASQSPEK SAAGGGGGSA GGGAGGAKTS KGSSKKCGKL KAPAAAGAKA  180
       GAGKAAQSGD YGGAGDDYVL GSLRVSGSGG GGAGKTVKCV FLDEDDDDDD DDDELQLQIK  240
       QEPDEEDEEP FHQQLLQPPG QQPSQLLRRY NVAKVPASPT LSSSAESPEG ASLYDEVRAG  300
       ATSGAGGGSR LYYSFKNITK QHPPPLAQPA LSPASSRSVS TSSSSSSGSS SGSSGEDADD  360
       LMFDLSLNFS QSAHSASEQQ LGGGAAAGNL SLSLVDKDLD SFSEGSLGSH PEPPDYCTPE  420
       LSEMIAGDWL EANFSDLVFT Y
```

Seq ID NO: 513 DNA sequence
Nucleic Acid Accession #: CAT Cluster

```
        1         11        21        31        41        51
        |         |         |         |         |         |
       GGTCGACCTA AATCTGATAA CTGGCTTATT ATGTAATTTA TTGGTGTTAT TATAGTAGAG   60
       ATTGGTAATC TACAGTAAGA TTTTCAGTTA GGATTTGAGA TTATGATAAT AACTAATAGA  120
       ATATTTCTAA ATTGGAATTA GAAGATTGTT GTATGACAGA GAGTCAGGAC TTGCCATTTG  180
```

```
GCAAACATCA AAGTCATTGT TTGGTGTGTA ATAGTACAAA ATCATCTTGC TTAACAGAGA    240
AAGGATATCT GTTGCTCCCG AATGAAACAA TTTTTCTGAA ATAGAGGGCC CAGAATTGGT    300
CTCTGACAAT TAATAAAGAC ATCAAAGATA GCAAAATGAT TTTTATATCT TAGGGCCAAT    360
ACTACCAATT TAATAATTAA AACAAGTTCT GGTGAGCTCT GAACTTGGCA GAATTGGTGG    420
CAACATAGAC TTTGGATTTT CCAAATTCCC CACATAAAAC AAAGGGGATC AACTAGATAG    480
AAAAACCAGA AACCTTTGGA AATATCTGTT TAAAAAAAAA AAAAAGTCGA CGCGGGCC
```

Seq ID NO: 514 DNA sequence
Nucleic Acid Accession #: CAT cluster

```
1         11        21        31        41        51
|         |         |         |         |         |
GGAGCCACAG TGAAAGTCAA GAATGTCAGT GATTCCACAT TTAATATCTA CATTTTTGCA    60
GGGCAGTTAC TCTTTTGTAG TATAACATTG AGCTGATAGC ACATAGTGTA GACAAGTGAA    120
TACAGGATTC TCTGGGTTGT ATTCCCAGAA GTCTGGAGGT CATTTGGATA TTTGTGGGCC    180
CTTGGCTTCA CTCTGACTTG TGTGACACAT AAAAATTGTG ATGAAATGTC CTATAGATGT    240
CCTGCAGGTC TTAAAAGAAC CTTTCCAAAC TATGAAACAG CCCAGCAGCA CTGAGTTAGA    300
GGTAAATTCT GAACCCTTGA ACACTAAAAC TATTCTAACT GCACATAGAA TTGGCAAGTA    360
GCATTCTATG TCTATGAACA GTATGTCTTT TCTATATAAC AGAGAAAATC TTTTTAAGCA    420
AACTACTCAG TTTAAAACCT AATTCTTCTC ATAATCTCAG TACTTTTGAA TGAAGACATA    480
TCAATGCAAC AGTACACTCT TATTCAGGCA TTTGAAAGAA AGAATTCGAG ATCTAGTTTG    540
TATCAGATAT TATAAATTAG TATGGTTTAG TCTTTGTCAT GAAATTCTAC TTAATTTTTG    600
GACTATAGGT TTAAGAATGT AAGCAGAAGT TCTGCACCAA TCAGAATAAG CTACATTATG    660
CTTGAGTGAC AACTACTGTA ATGACAAAAT ATCAGTGGCT TAATACAATG GTTTTTCTCT    720
CATACTTGTT CATAAAGAGT CAGCAAGGAC CCTGCTCATT ATGGTCCCTC AGGGACCCAG    780
GGTTGTTGGA AGCTCCACCA TTTTAGATAG CTCCCTTCAA AGTCAGCCAT CTTTGGCAGT    840
CCATGTCCCC CAACAGGCTG GCAAAATTTG GCTCTGGATG GCTTCAAGGA TTGAGCATCG    900
GGCAGTTTAA ATGCTTTCAA CATGGAAAGT GGACACCGGC CACTCCCACT CACATCCCTT    960
GGGCCAGAAC TAGGTCACTG GGCCCGGACC TAACTTCGGA GGGTTGGGGA ATTGTAATTC   1020
CTCCATGTAC CCAAAGTGGA GAGAAGCCAG ATACTGAGAA ACATCAATAA TGGCTAACAG   1080
AAATCCATTC TACCATTCCC TTTGCCTAAA GTGAAAAGAT GAGTACTTTC ATCAATTTGT   1140
AAACTGTACT TTTGAAGTAA ATCCTGGTAG CTTGCATGGG GGCTGGATTT CCAGAAAGCC   1200
ATATGTAATT TGGGAATGAC ATTCACTTAA GCTCATAGAA TATCATTATT TGATGTAAAA   1260
TGCCCTCATT TGCAATACAG GACCAAAATG CACTAACCAC AAAACCCCCC TCCCCACGGG   1320
GCCCGGGGTC CCTATTCCCC TCCATCCCTT TAAATGAGGC ATTCTATGAT TTGGAATGGA   1380
AGCCCAGTTG TAGTCGTAAG AATTTTACTT AATTCAAGAA TTATTCTCAC TGAATATGTG   1440
CCAGTTCTGA AAGGAATGCA AAGTCAAATT TTGCATCTTC TTTGCTCAAG GGCCTTTAGA   1500
TGTAACAACA CAGACATGAT ACAAGGCTGA CAATGACATT ATGATTAAA TATGTTAAAC   1560
AACTTATTAA ATTGTGAATC AACAAAAAAT TATGTTCTTT ATTTTATGGT TTTGCATAGT   1620
CCTGACTCAC TGCCTACATA CCCCTCTTGT TCCTCAGTTC TTATCCCTGA TTTCTTACAG   1680
GATGGCCTAA GACAGCTGTA GATGTTTTTA TTTAGCAAAA AAAAAAAAAA AAAAGTCGAC   1740
GCGGCCGCGA ATTTAGTAG
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Seq ID NO: 515 DNA sequence
Nucleic Acid Accession #: NM_012427
Coding sequence: 43..924

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1         11        21        31        41        51
|         |         |         |         |         |
CTTGTGGTTC CTCTCTACTT GGGGAAATCA GGTGCAGCGG CCATGGCTAC AGCAAGACCC    60
CCCTGGATGT GGGTGCTCTG TGCTCTGATC ACAGCCTTGC TTCTGGGGGT CACAGAGCAT    120
GTTCTCGCCA ACAATGATGT TTCCTGTGAC CACCCCTCTA ACACCGTGCC CTCTGGGAGC    180
AACCAGGACC TGGGGAGCTGG GGCCGGGGAA GACGCCCGGT CGGATGACAG CAGCAGCCGC    240
ATCATCAATG GATCCGACTG CGATATGCAC ACCCAGCCGT GGCAGGCCGC GCTGTTGCTA    300
AGGCCCAACC AGCTCTACTG CGGGGCGGTG TTGGTGCATC CACAGTGGCT GCTCACGGCC    360
GCCCACTGCA GGAAGAAAGT TTTCAGAGTC CGTCTCGGCC ACTACTCCCT GTCACCAGTT    420
TATGAATCTG GGCAGCAGAT GTTCCAGGGG GTCAAATCCA TCCCCCACCC TGGCTACTCC    480
CACCCTGGCC ACTCTAACGA CCTCATGCTC ATCAAACTGA ACAGAAGAAT TCGTCCCACT    540
AAAGATGTCA GACCCATCAA CGTCTCCTCT CATTGTCCCT CTGCTGGGAC AAAGTGCTTG    600
GTGTCTGGCT GGGGGACAAC CAAGAGCCCC AAGTGCACT TCCCTAAGGT CCTCCAGTGC    660
TTGAATATCA GCGTGCTAAG TCAGAAAAGG TGCGAGGATG CTTACCCGAG ACAGATAGAT    720
GACACCATGT TCTGCGCCGG TGACAAAGCA GGTAGAGACT CCTGCCAGGG TGATTCTGGG    780
GGGCCTGTGG TCTGCAATGG CTCCCTGCAG GGACTCGTGT CCTGGGGAGA TTACCCTTGT    840
GCCCGGCCCA ACAGACCGGG TGTCTACACG AACCTCTGCA AGTTCACCAA GTGGATCCAG    900
GAAACCATCC AGGCCAACTC CTGAGTCATC CCAGGACTCA GCACACCGGC ATCCCCACCT    960
GCTGCAGGGA CAGCCCTGAC ACTCCTTTCA GACCCTCATT CCTTCCCAGA GATGTTGAGA   1020
ATGTTCATCT CTCCAGCCCC TGACCCCATG TCTCCTGGAC TCAGGGTCTG CTTCCCCCAC   1080
ATTGGGCTGA CCGTGTCTCT CTAGTTGAAC CCTGGGAACA ATTTCCAAAA CTGTCCAGGG   1140
CGGGGGTTGC GTCTCAATCT CCCTGGGGCA CTTTCATCCT CAAGCTCAGG GCCCATCCCT   1200
TCTCTGCAGC TCTGACCCAA ATTTAGTCCC AGAAATAAAC TGAGAAGTGG AAAAAAAAA
```

Seq ID NO: 516 Protein sequence
Protein Accession #: NP_036559

```
1         11        21        31        41        51
|         |         |         |         |         |
MATARPPWMW VLCALITALL LGVTEHVLAN NDVSCDHPSN TVPSGSNQDL GAGAGEDARS    60
DDSSSRIING SDCDMHTQPW QAALLLRPNQ LYCGAVLVHP QWLLTAAHCR KKVFRVRLGH   120
YSLSPVYESG QQMFQGVKSI PHPGYSHPGH SNDLMLIKLN RRIRPTKDVR PINVSSHCPS   180
AGTKCLVSGW GTTKSPQVHF PKVLQCLNIS VLSQKRCEDA YPRQIDDTMF CAGDKAGRDS   240
CQGDSGGPVV CNGSLQGLVS WGDYPCARPN RPGVYTNLCK PTKWIQETIQ ANS
```

1153

Seq ID NO: 517 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001719
Coding sequence: 123..1418

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      1         11        21        31        41        51
      |         |         |         |         |         |
      GGGCGCAGCG GGGCCCGTCT GCAGCAAGTG ACCGACGGCC GGGACGGCCG CCTGCCCCCT   60
      CTGCCACCTG GGGCGGTGCG GGCCCGGAGC CCGGGAGCCCG GGTAGCGCGT AGAGCCGGCG  120
      CGATGCACGT GCGCTCACTG CGAGCTGCGG CGCCGCACAG CTTCGTGGCG CTCTGGGCAC  180
      CCCTGTTCCT GCTGCGCTCC GCCCTGGCCG ACTTCAGCCT GGACAACGAG GTGCACTCGA  240
      GCTTCATCCA CCGGCGCCTC CGCAGCCAGG AGCGGCGGGA GATGCAGCGC GAGATCCTCT  300
      CCATTTTGGG CTTGCCCCAC CGCCCGCGCC CGCACCTCCA GGGCAAGCAC AACTCGGCAC  360
      CCATGTTCAT GCTGGACCTG TACAACGCCA TGGCGGTGGA GGAGGGCGGC GGGCCCGGCG  420
      GCCAGGGCTT CTCCTACCCC TACAAGGCCG TCTTCAGTAC CCAGGGCCCC CCTCTGGCCA  480
      GCCTGCAAGA TAGCCATTTC CTCACCGACG CCGACATGGT CATGAGCTTC GTCAACCTCG  540
      TGGAACATGA CAAGGAATTC TTCCACCCAC GCTACCACCA TCGAGAGTTC CGGTTTGATC  600
      TTTCCAAGAT CCCAGAAGGG GAAGCTGTCA CGGCAGCCGA ATTCGGGATC TACAAGGACT  660
      ACATCCGGGA ACGCTTCGAC AATGAGACGT TCCGGATCAG CGTTTATCAG GTGCTCCAGG  720
      AGCACTTGGG CAGGGAATCG GATCTCTTCC TGCTCGACAG CCGTACCCTC TGGGCCTCGG  780
      AGGGAGGGCTG GCTGGTGTTT GACATCACGA CCACCAGCAA CCACTGGGTG GTCAATCCGC  840
      GGCACAACCT GGGCCTGCAG CTCTCGGTGG AGACGCTGGA TGGGCAGAGC ATCAACCCCA  900
      AGTTGGCGGG CCTGATTGGG CGGCACGGGC CCAGAACAA GCAGCCCTTC ATGGTGGCTT  960
      TCTTCAAGGC CACGGAGGTC CACTTCCGCA GCATCCGGTC CACGGGGAGC AAACAGCGCA 1020
      GCCAGAACCG CTCCAAGACG CCCAAGAACC AGGAAGCCCT GCGGATGGCC AACGTGGCAG 1080
      AGAACGCAG CAGCGACCAG AGGCAGGCCT GTAAGAAGCA CGAGCTGTAT GTCAGCTTCC 1140
      GAGACCTGGG CTGGCAGGAC TGGATCATCG CGCCTGAAGG CTACGCCGCC TACTACTGTG 1200
      AGGGGGAGTG TGCCTTCCCT CTGAACTCCT ACATGAACGC CACCAACCAC GCCATCGTGC 1260
      AGACGCTGGT CCACTTCATC AACCCGGAAA CGGTGCCCAA GCCCTGCTGT GCGCCCACGC 1320
      AGCTCAATGC CATCTCCGTC CTCTACTTCG ATGACAGCTC CAACGTCATC CTGAAGAAAT 1380
      ACAGAAACAT GGTGGTCCGG GCCTGTGGCT GCCACTAGCT CCTCCGAGAA TTCAGACCCT 1440
      TTGGGGCCAA GTTTTTCTGG ATCCTCCATT GCTCGCCTTG GCCAGGAACC AGCAGACCAA 1500
      CTGCCTTTTG TGAGACCTTC CCCTCCCTAT CCCCAACTTT AAAGGTGTGA GAGTATTAGG 1560
      AAACATGAGC AGCATATGGC TTTTGATCAG TTTTTCAGTG GCAGCATCCA ATGAACAAGA 1620
      TCCTACAAGC TGTGCAGGCA AAACCTAGCA GGAAAAAAAA ACAACGCATA AAGAAAAATG 1680
      GCCGGGCCAG GTCATTGGCT GGGAAGTCTC AGCCATGCAC GGACTCGTTT CCAGAGGTAA 1740
      TTATGAGCGC CTACCAGCCA GGCCACCCAG CCGTGGGAGG AAGGGGGCGT GGCAAGGGGT 1800
      GGGCACATTG GTGTCTGTGC GAAAGGAAAA TTGACCCGGA AGTTCCTGTA ATAAATGTCA 1860
      CAATAAAACG AATGAATG
```

Seq ID NO: 518 <u>Protein sequence</u>
Protein Accession #: NP_001710

```
      1         11        21        31        41        51
      |         |         |         |         |         |
      MHVRSLRAAA PHSFVALWAP LFLLRSALAD FSLDNEVHSS FIHRRLRSQE RREMQREILS   60
      ILGLPHRPRP HLQGKHNSAP MFMLDLYNAM AVEEGGGPGG QGFSYPYKAV FSTQGPPLAS  120
      LQDSHFLTDA DMVMSFVNLV EHDKEFFHPR YHHREFRFDL SKIPEGEAVT AAEFRIYKDY  180
      IRERFDNETF RISVYQVLQE HLGRESDLFL LDSRTLWASE EGWLVFDITA TSNHWVVNPR  240
      HNLGLQLSVE TLDGQSINPK LAGLIGRHGP QNKQPFMVAF FKATEVHFRS IRSTGSKQRS  300
      QNRSKTPKNQ EALRMANVAE NSSSDQRQAC KKHELYVSFR DLGWQDWIIA PEGYAAYYCE  360
      GECAFPLNSY MNATNHAIVQ TLVHFINPET VPKPCCAPTQ LNAISVLYFD DSSNVILKKY  420
      RNMVVRACGC H
```

Seq ID NO: 519 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 264..782

```
      1         11        21        31        41        51
      |         |         |         |         |         |
      CCCTGCTCCA GTCACACCCG GAAGCTGACT GGTCCACGCA CAGCTGAAGC ATGAGGAAAC   60
      TCATCGCGGG ACTAATTTTC CTTAAAATTT AGACTTGCAC AGTAAGGACT TCAACTGACC  120
      TTCCTCAGAC TGAGAACTGT TTCCAGTATA TACATCAAGT CACTGAGATC TCCAGCACCC  180
      TGCCGGTGGC ACTACTGAGA GACGAGGTGC CAGGGTGGTT CCTGAAAGTG CCTGAGCCCC  240
      AACTTATCGA CAAGGAGCTC ATCATGCTGA CAGAAGTCAT GGAGGTCTGG CATGGCTTAG  300
      TGATCGCGGT GGTGTCCCTC TTCCTGCAGG CCTGCTTCCT CACCGCCATC AACTACCTGC  360
      TCAGCAGGCA CATGGCCCAC AAGAGTGAAC AGATACTGAA AGCGGCCAGT CTCCAGGTTC  420
      CCAGGCCCAG CCCTGGCCAC CATCATCCAC CTGCTGTCAA AGAGATGAAG GAGACTCAGA  480
      CAGAGAGAGA CATCCCAATG TCTGATTCCC TTTACAGGCA TGACAGCGAC ACACCCTCAG  540
      ATAGCTTGGA TAGCTCCTGC AGTTCGCCTC CTGCCTGCCA GGCCACAGAG GATGTGGATT  600
      ACACACAAGT CGTCTTTTCT GACCCTGGAG AACTAAAAAA TGACTCCCCG CTGGACTATG  660
      AGAACATAAA GGAAATCACA GATTATGTCA ATGTCAATCC AGAAAGACAC AAGCCCAGTT  720
      TCTGGTATTT TGTCAACCCT GCTCTGTCTG AGCCAGCGGA ATATGATCAA GTGGCCATGT  780
      GAATTCCAAA TATTTTTAAT GGGGTCCAGT TCTCTATGGA TTCTTACATT TAATTTGTAG  840
      GGAAATGCCA TTTTTCCCCC TTAAACAAGG CATGGGGGCTC ACAAGTCTAT GGAGACAGGC  900
      CAAAAAGAAT GTGGAGAAGA AAACTGATAA ATACACAGAG GTCCTCAAGA CCCATGGACT  960
      CCTGGTCTGT ACCCAAAAAA GCTGTTCGTT CCTCAAAAAC AAAAACAAGG CTTGGCTGGG 1020
      AAAACAGGCC AATGCCCCGG CAAGAAAGGT TGAGATCAGA TGTTAGGAAG AACTTTCAGG 1080
      TAAAGTATGA GAACTATGGA GTCCATCAGC AGAGATAGTA GTGAAGTCTC TCCCCAGGGA 1140
      AAATTTTAAA AAGGTTGAAT CAGCTGTTGT AGAGTTCTAT TTGGCAATCT CATGGTTAAA 1200
      TGACTTCCCT TTGAGCTCTT TAATTATTGG CAATAAACAA CTTCTTTAAA AGTTTTAAAT 1260
      AAAATAGCAA CCACCACCA
```

Seq ID NO: 520 <u>Protein sequence</u>
Protein Accession #: Eos sequence

```
         1         11        21        31        41        51
         |         |         |         |         |         |
      MLTEVMEVWH GLVIAVVSLF LQACFLTAIN YLLSRHMAHK SEQILKAASL QVPRPSPGHH    60
      HPPAVKEMKE TQTERDIPMS DSLYRHDSDT PSDSLDSSCS SPPACQATED VDYTQVVFSD   120
      PGELKNDSPL DYENIKEITD YVNVNPERHK PSFWYFVNPA LSEPAEYDQV AM
```

Seq ID NO: 521 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 107..328

```
         1         11        21        31        41        51
         |         |         |         |         |         |
      CTGCTCTGTC TGAGCCAGCG GAATATGATC AAGTGGCCAT GTGAATTCCA AATATTTTTA    60
      ATGGGGTCCA GTTCTCTATG GATTCTTACA TTTAATTTGT AGGGAAATGC CATTTTTCCC   120
      CCTTAAACAA GGCATGGGGC TCACAAGTCT ATGGAGACAG GCCAAAAAGA ATGTGGGAGAA  180
      GAAAACTGAT AAATACACAG AGGTCCTCAA GACCCATGGA CTCCTGGTCT GTACCCAAAA   240
      AAGCTGTTCG TTCCTCAAAA ACAAAAACAA GGCTTGGCTG GGAAAACAGG CCAATGCCCC   300
      GGCAAGAAAG GTTGAGATCA GATGTTAGGA AGAACTTTCA GGTAAAGTAT GAGAACTATG   360
      GAGTCCATCA GCAGAGATAG TAGTGAAGTC TCTCCCCAGG GAAAATTTTA AAAAGGTTGA   420
      ATCAGCTGTT GTAGAGTTCT ATTTGGCAAT CTCATGGTTA AATGACTTCC CTTTGAGCTC   480
      TTTAATTATT GGCAATAAAC AACTTCTTTA AAAGTTTTAA ATAAAATAGC AACCACCACC   540
      A
```

Seq ID NO: 522 <u>Protein sequence</u>
Protein Accession #: Eos sequence

```
         1         11        21        31        41        51
         |         |         |         |         |         |
      MPFFPLKQGM GLTSLWRQAK KNVEKKTDKY TEVLKTHGLL VCTQKSCSFL KNKNKAWLGK    60
      QANAPARKVE IRC
```

Seq ID NO: 523 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 211..1895

```
         1         11        21        31        41        51
         |         |         |         |         |         |
      GGATCTGAGG GGCGCCCAGT CACTTCCTCC ACGTTCTCGT GCTGGGCGGG AGGAGCGGAT    60
      GGGGCTTGGG AGGCAGCCTG CTCTCCAGTC CCTATCCACC CACAGGTTTT TTGGGTCGGA   120
      GAGGAATTAT CTGATAAAAT TCCTGGGTTA ATATTTTTAA AAACGGAGAG TTTTTAAAAA   180
      TGATTTTTTT CCCTCGAAAA TGACCTTTTT ATGCTTCGAA GCAGTTTGTC AACCAGCATA   240
      GTGCTTTTTC TTTTCTCTTC TTTTTCTACG ATAAATGAAA GCATTTCTTC AAGAAAAAGG   300
      CACAGGTTCC TTGAACAGCT GGATTCTGAT GGCACCATTA CTATAGAGGA GCAGATTGTC   360
      CTTGTGCTGA AAGCGAAAGT ACAATGTGAA CTCAACATCA CAGCTCAACT CCAGGAGGGA   420
      GAAGGTAATT GTTTCCCTGA ATGGGATGGA CTCATTTGTT GGCCCAGAGG AACAGTGGGG   480
      AAAATATCGG CTGTTCCATG CCCTCCTTAT ATTTATGACT TCAACCATAA AGGAGTTGCT   540
      TTCCGACACT GTAACCCCAA TGGAACATGG GATTTTATGC ACAGCTTAAA TAAAACATGG   600
      GCCAATTATT CAGACTGCCT TCGCTTTCTG CAGCCAGATA TCAGCATAGG AAAGCAAGAA   660
      TTCTTTGAAC GCCTCTATGT AATGTATACC GTTGGCTACT CCATCTCTTT TGGTTCCTTA   720
      GCTGTGGCTA TTCTCATCAT TGGTTACTTC AGACGATTGC ATTGCACTAG GAACTATATC   780
      CACATGCACT TATTTGTGTC TTTCATGCTG AGAGCTACAA GCATCTTTGT CAAAGACAGA   840
      GTAGTCCATG CTCACATAGG AGTAAAGGAG CTGGAGTCCC TAATAATGCA GGATGACCCA   900
      CAAAATTCCA TTGAGGCAAC TTCTGTGGAC AAATCACAAT ATATCGGGTG CAAGATTGCT   960
      GTTGTGATGT TTATTTACTT CCTGGCTACA AATTATTATT GGATCCTGGT GGAAGGTCTC  1020
      TACCTGCATA ATCTCATCTT TGTGGCTTTC TTTTCGGACA CCAAATACCT GTGGGGCTTC  1080
      ATCTTGATAG GCTGGGGGTT TCCAGCAGCA TTTGTTGCAG CATGGGCTGT GGCACGAGCA  1140
      ACTCTGGCTG ATGCGAGGTG CTGGGACTT AGTGCTGGAG ACATCAAGTG GATTTATCAA  1200
      GCACCGATCT TAGCAGCTAT TGGGCTGAAT TTTATTCTGT TTCTGAATAC GGTTAGAGTT  1260
      CTAGCTACCA AAATCTGGGA GACCAATGCA GTTGGGCATG ACACAAGGAA GCAATACAGG  1320
      AAACTGGCCA AATCGACACT GGTCCTGGTC CTAGTCTTTG GAGTGCATTA CATCGTGTTC  1380
      GTATGCCTGC CTCACTCCTT CACTGGGCTC GGGTGGGAGA TCCGCATGCA CTGTGAGCTC  1440
      TTCTTCAACT CCTTTCAGGG TTTCTTTGTG TCTATCATCT ACTGCTACTG CAATGGAGAG  1500
      GTTCAGGCAG AGGTGAAGAA GATGTGGAGT CGGTGGAATC TCTCCGTGGA CTGGAAAAGG  1560
      ACACCGCCAT GTGGCAGCCG CAGATGCGGC TCAGTGCTCA CCACCGTGAC GCACAGCACC  1620
      AGCAGCCAGT CACAGGTGGC GGCCAGCACA CGCATGGTGC TTATCTCTGG CAAAGCTGCC  1680
      AAGATCGCCA GCAGACAGCC TGACAGCCAC ATCACTTTAC CTGGCTATGT CTGGAGTAAC  1740
      TCAGAGCAGG ACTGCCTGCC ACACTCTTTC CACGAGGAGA CCAAGGAAGA TAGTGGGAGG  1800
      CAGGGAGATG ATATTCTAAT GGAGAAGCCT TCCAGGCCTA TGGAATCTAA CCCAGACACT  1860
      GAAGGATGCC AAGGAGAAAC TGAGGATGTT CTCTGA
```

Seq ID NO: 524 <u>Protein sequence</u>
Protein Accession #: Eos sequence

```
         1         11        21        31        41        51
         |         |         |         |         |         |
      MLRSSLSTSI VLFLFSSFST INESISSRKR HRPLEQLDSD GTITIEEQIV LVLKAKVQCE    60
      LNITAQLQEG EGNCFPEWDG LICWPRGTVG KISAVPCPPY IYDFNHKGVA FRHCNPNGTW   120
      DFMHSLNKTW ANYSDCLRFL QPDISIGKQE FPBRLYVMYT VGYSISFGSL AVAILIIGYF   180
      RRLHCTRNYI HMHLFVSFML RATSIFVKDR VVHAHIGVKE LESLIMQDDP QNSIEATSVD   240
      KSQYIGCKIA VVMFIYPLAT NYYWILVEGL YLHNLIFVAF FSDTKYLWGF ILIGWGFPAA   300
      FVAAWAVARA TLADARCWEL SAGDIKWIYQ APILAAIGLN FILPLNTVRV LATKIWETNA   360
      VGHDTRKQYR KLAKSTLVLV LVFGVHYIVF VCLPHSFTGL GWEIRMHCEL FFNSFQGFFV   420
      SIIYCYCNGE VQAEVKKMWS RWNLSVDWKR TPPCGSRRCG SVLTTVTHST SSQSQVAAST   480
```

```
        RMVLISGKAA KIASRQPDSH ITLPGYVWSN SEQDCLPHSF HEETKEDSGR QGDDILMEKP    540
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 5   Seq ID NO: 525 DNA sequence
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25      GATCCTGGTG GAAGGTCTCT ACCTGCATAA TCTCATCTTT GTGGCTTTCT TTTCGGACAC    960
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        ATGGGCTGTG GCACGAGCAA CTCTGGCTGA TGCGAGGTGC TGGGAACTTA GTGCTGGAGA   1080
        CATCAAGTGG ATTTATCAAG CACCGATCTT AGCAGCTATT GGGCTGAATT TTATTCTGTT   1140
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        CTGCTACTGC AATGGAGAGG TTCAGGCAGA GGTGAAGAAG ATGTGGAGTC GGTGGAATCT   1440
        CTCCGTGGAC TGGAAAAGGA CACCGCCATG TGGCAGCCGC AGATGCGGCT CAGTGCTCAC   1500
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        MHLFVSFMLR ATSIFVKDRV VHAHIGVKEL ESLIMQDDPQ NSIEATSVDK SQYIGCKIAV    240
65      VMPIYFLATN YYWILVEGLY LHNLIFVAPF SDTKYLNGPI LIGWGFPAAP VAAWAVARAT    300
        LADARCWELS AGDIKWIYQA PILAAIGLNF ILFLNTVRVL ATKIWETNAV GHDTRKQYRK    360
        LAKSTLVLVL VFGVHYIVFV CLPHSFTGLG WEIRMHCELF FNSFQGFFVS IIYCYCNGEV    420
        QAEVKKMWSR WNLSVDWKRT PPCGSRRCGS VLTTVTHSTS SQSQVAASTR MVLISGKAAK    480
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        Seq ID NO: 527 DNA sequence
        Nucleic Acid Accession #: XM_036683
        Coding sequence: 38..3655

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        GTCGCGAGG GACGTGTCTT CCAACCCTGA GCAGTTGTTC TTTAACATCA CGGCATTTGG    300
        AAAAGATTTT CATCTGCGAC TAAAGCCCAA CACTCAACTA GTAGCTCCTG GGGCTGTTGT    360
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        1156

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1157

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Seq ID NO: 528 <u>Protein sequence</u>
Protein Accession #: XP_036683

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      TDPINNHQPG SATYRIRKTE PLQTNCAYVG DIVDIPGTSV AISNCDGLAG MIKSDNEEYF   180
      IEPLERGKQM EEEKGRIHVV YKRSAVEQAP IDMSKDFHYR ESDLEGLDDL GTVYGNIHQQ   240
      LNETMRRRRH AGENDYNIEV LLGVDDSVVR PHGKEHVQNY LLTLMNIVNE IYHDESLGVH   300
      INVVLVRMIM LGYAKSISLI ERGNPSRSLE NVCRWASQQQ RSDLNHSEHH DHAIFLTRQD   360
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      GVEWDYNIED DIESLHTDGP LHDPVIVLII PQENDTRSSL TYKYIIHEDS VPTINSNNVI   840
      QEELDTFEWA LKSWSQCSKP CGGGFQYTKY GCRRKSDNKM VHRSFCEANK KPKPIRRMCN   900
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Seq ID NO: 530 <u>Protein sequence</u>
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      AHCKKPNLQV FLGKHNLRQR ESSQEQSSVV RAVIHPDYDA ASHDQDIMLL RLARPAKLSE   120
      LIQPLPLERD CSANTTSCHI LGWGKTADGD FPDTIQCAYI HLVSREECEH AYPGQITQNM   180
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Seq ID NO: 531 <u>DNA sequence</u>
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       AGGCAGTGTG GCGTGCAGCA TGTGAAAAGG TGGTTCCTGC TGCTGGCGCT GCTCAACTCC   900
       GTCGTGAACC CCATCATCTA CTCCTACAAG GACGAGGACA TGTATGGCAC CATGAAGAAG   960
       ATGATCTGCT GCTTCTCTCA GGAGAACCCA GAGAGGCGTC CCTCTCGCAT CCCCTCCACA  1020
       GTCCTCAGCA GGAGTGACAC AGGCAGCCAG TACATAGAGG ATAGTATTAG CCAAGGTGCA  1080
20     GTCTGCAATA AAAGCACTTC CTAAACTCTG GATGCCTCTC GGCCCACCCA GGTGATGACT  1140
       GTCTTAGG
```

Seq ID NO: 532 <u>Protein sequence</u>
Protein Accession #: NP_036284

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       1          11         21         31         41         51
       |          |          |          |          |          |
       MNECHYDKHM DPFYNRSNTD TVDDWTGTKL VIVLCVGTFF CLFIFFSNSL VIAAVIKNRK    60
       FHFPFYYLLA NLAAADPFAG IAYVFLMFNT GPVSKTLTVN RWFLRQGLLD SSLTASLTNL   120
       LVIAVERHMS IMRMRVHSNL TKKRVTLLIL LVWAIAIFMG AVPTLGWNCL CNISACSSLA   180
       PIYSRSYLVF WTVSNLMAFL IMVVVYLRIY VYVKRKTNVL SPHTSGSISR RRTPMKLMKT   240
       VMTVLGAFVV CWTPGLVVLL LDGLNCRQCG VQHVKRWFLL LALLNSVVNP IIYSYKDEDM   300
       YGTMKKMICC FSQENPERRP SRIPSTVLSR SDTGSQYIED SISQGAVCNK STS
```

Seq ID NO: 533 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_002821
Coding sequence: 150..3362

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       1          11         21         31         41         51
       |          |          |          |          |          |
40     AACTCCCGCC TCGGGACGCC TCGGGGTCGG GCTCCGGCTG CGGCTGCTGC TGCGGCGCCC    60
       GCGCTCCGGT GCGTCCGCCT CCTGTGCCCG CCGCGGAGCA GTCTGCGGCC CGCCGTGCGC   120
       CCTCAGCTCC TTTTCCTGAG CCCGCCGCGA TGGGAGCTGC GCGGGGATCC CCGGCCAGAC   180
       CCCGCCGGTT GCCTCTGCTC AGCGTCCTGC TGCTGCCGCT GCTGGGCGGT ACCCAGACAG   240
45     CCATTGTCTT CATCAAGCAG CCGTCCTCCC AGGATGCACT GCAGGGGCGC CGGGCGCTGC   300
       TTCGCTGTGA GGTTGAGGCT CCGGGGCCCG TACATGTGTA CTGGCTGCTC GATGGGGCCC   360
       CTGTCCAGGA CACGGAGCGG CGTTTCGCCG AGGGCAGCAG CCTGAGCTTT GCAGCTGTGG   420
       ACCGGCTGCA GGACTCTGGC ACCTTCCAGT GTGTGGCTCG GGATGATGTC ACTGGAGAGG   480
       AAGCCCGCAG TGCCAACGCC TCCTTCAACA TCAAATGGAT TGAGGCAGGT CCTGTGGTCC   540
50     TGAAGCATCC AGCCTCGGAA GCTGAGATCC AGCCACAGAC CCAGGTCACA CTTCGTGGCC   600
       ACATTGATGG GCACCCTCGG CCCAACCTACC AATGGTTCCG AGATGGGACC CCCCTTTCTG   660
       ATGGTCAGAG CAACCACACA GTCAGCAGCA AGGAGCGGAA CCTGACGCTC CGGCCAGCTG   720
       GTCCTGAGCA TAGTGGGCTG TATTCCTGCT GCGCCCACAC TGCTTTTGGC CAGGCTTGCA   780
55     GCAGCCAGAA CTTCACCTTG AGCATTGCTG ATGAAAGCTT TGCCAGGGTG TGTGCTGGCAG   840
       CCCAGGACGT GGTAGTAGCG AGGTATGAGG AGGCCATGTT CCATTGCCAG TTCTCAGCCC   900
       AGCCACCCCC GAGCCTGCAG TGGCTCTTTG AGGATGAGAC TCCCATCACT AACCGCAGTC   960
       GCCCCCCACA CCTCCGCAGA GCCACAGTGT TTGCCAACGG GTCTCTGCTG CTGACCCAGG  1020
       TCCGGCCACG CAATGCAGGG ATCTACCGCT GCATTGGCCA GGGGCAGAGG GGCCCACCCA  1080
       TCATCCTGGA AGCCACACTT CACCTAGCAG AGATTGAAGA CATGCCGCTA TTTGAGCCAC  1140
60     GGGTGTTTAC AGCTGGCAGC GAGGAGCGTG TGACCTGCCT TCCCCCCAAG GGTCTGCCAG  1200
       AGCCCAGCGT GTGGTGGGAG CACGCGGGAG TCCGGCTGCC CACCCCATGGC AGGGTCTACC  1260
       AGAAGGGCCA CGAGCTGGTG TTGCCCAATA TTGCTGAAAG TGATGCTGGT GTCTACACCT  1320
       GCCACGCGGC CAACCTGGCT GGTCAGCGGA GACAGGATGT CAACATCACT GTGGCCACTG  1380
65     TGCCCTCCTG GCTGAAGAAG CCCCAAGACA GCCAGCTGGA GGAGGGCAAA CCCGGCTACT  1440
       TGGATTGCCT GACCCAGGCC ACACCAAAAC CTACAGTTGT CTGGTACAGA AACCAGATGC  1500
       TCATCTCAGA GGACTCACGG TTCGAGGTCT TCAAGAATGG GACCTTGCGC ATCAACAGCG  1560
       TGGAGGTGTA TGATGGGACA TGGTACCGTT GTATGAGCAG CACCCCAGCC GGCAGCATCG  1620
       AGGCGCAAGC CCGTGTCCAA GTGCTGGAAA AGCTCAAGTT CACACCACCA CCCCAGCCAC  1680
70     AGCAGTGCAT GGAGTTTGAC AAGGAGGCCA CGGTGCCCTG TTCAGCCACA GGCCGAGAGA  1740
       AGCCCACTAT TAAGTGGGAA CGGGCAGATG GGAGCAGCCT CCCAGAGTGG GTGACAGACA  1800
       ACGCTGGGAC CCTGCATTTT GCCCGGGTGA CTCGAGATGA CGCTGGCAAC TACACTTGCA  1860
       TTGCCTCCAA CGGGGCCGCAG GGCCAGATTC GTGCCCATGT CCAGCTCACT GTGGCAGTTT  1920
75     TTATCACCTT CAAAGTGGAA CCAGAGCGTA CGACTGTGTA CAGGGCCCAC ACAGCCCTAC  1980
       TGCAGTGCGA GGCCCAGGGG GACCCCAAGC CGCTGATTCA GTGGAAAGGC AAGGACCGCA  2040
       TCCTGGACCC CACCAAGCTG GGACCCAGGA TGCACATCTT CCAGAATGGC TCCCTGGTGA  2100
       TCCATGACGT GGCCCCTGAG GACTCAGGCC GCTACACCTG CATTGCAGGC AACAGCTGCA  2160
       ACATCAAGCA CACGGAGGCC CCCCTCTATG TGGTGGACAA GCCTGTGCCG GAGGAGTCGG  2220
80     AGGGCCCTGG CAGCCCTCCC CCCTACAAGA TGATCCAGAC CATTGGGTTG TCGGTGGGTG  2280
       CCGCTGTGGC CTACATCATT GCCGTGCTGG GCCTCATGTT CTACTGCAAG AAGCGCTGCA  2340
       AAGCCAAGCG GCTGCAGAAG CAGCCCGAGG GCGAGGAGCC AGAGATGGAA TGCCTCAACG  2400
       GAGGGCCTTT GCAGAACGGG CAGCCCTCAG CAGAGATCCA AGAAGAAGTG GCCTTGACCA  2460
       GCTTGGGCTC CGGCCCCGCG GCCACCAACA AACGCCACAG CACAAGTGAT AAGATGCACT  2520
       TCCCACGGTC TAGCCTGCAG CCCATCACCA CGCTGGGGAA GAGTGAGTGG GGGGAGGTGT  2580
       TCCTGGCAAA GGCTCAGGGC TTGGAGGAGG GAGTGGCAGA GACCCTGGTA CTTGTGAAGA  2640
```

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GCCTGCAGAC GAAGGATGAG CAGCAGCAGC TGGACTTCCG GAGGGAGTTG GAGATGTTTG  2700
GGAAGCTGAA CCACGCCAAC GTGGTGCGGC TCCTGGGGCT GTGCCGGGAG GCTGAGCCCC  2760
ACTACATGGT GCTGGAATAT GTGGATCTGG GAGACCTCAA GCAGTTCCTG AGGATTTCCA  2820
AGAGCAAGGA TGAAAAATTG AAGTCACAGC CCCTCAGCAC CAAGCAGAAG GTGGCCCTAT  2880
GCACCCAGGT AGCCCTGGGC ATGGAGCACC TGTCCAACAA CCGCTTTGTG CATAAGGACT  2940
TGGCTGCGCG TAACTGCCTG GTCAGTGCCC AGAGACAAGT GAAGGTGTCT GCCCTGGGCC  3000
TCAGCAAGGA TGTGTACAAC AGTGAGTACT ACCACTTCCG CCAGGCCTGG GTGCCGCTGC  3060
GCTGGATGTC CCCCGAGGCC ATCCTGGAGG GTGACTTCTC TACCAAGTCT GATGTCTGGG  3120
CCTTCGGTGT GCTGATGTGG GAAGTGTTTA CACATGGAGA GATGCCCCAT GGTGGGCAGG  3180
CAGATGATGA AGTACTGGCA GATTTGCAGG CTGGGAAGGC TAGACTTCCT CAGCCCGAGG  3240
GCTGCCCTTC CAAACTCTAT CGGCTGATGC AGCGCTGCTG GGCCCTCAGC CCCAAGGACC  3300
GGCCCTCCTT CAGTGAGATT GCCAGCGCCC TGGGAGACAG CACCGTGGAC AGCAAGCCGT  3360
GAGGAGGGAG CCCGCTCAGG ATGGCCTGGG CAGGGGAGGA CATCTCTAGA GGGAAGCTCA  3420
CAGCATGATG GGCAAGATCC CTGTCCTCCT GGGCCCTGAG GTGCCCAGT GCAACAGGCA  3480
TTGCTGAGGT CTGAGCAGGG CCTGGCCTTT CCTCCTCTTC CTCACCCTCA TCCTTTGGGA  3540
GGCTGACTTG GACCCAAACT GGGCGACTAG GGCTTTGAGC TGGCAGTTT CCCCTGCCAC  3600
CTCTTCCTCT ATCAGGGACA GTGTGGGTGC CACAGGTAAC CCCAATTTCT GGCCTTCAAC  3660
TTCTCCCCTT GACCGGGTCC AACTCTGCCA CTCATCTGCC AACTTTGCCT GGGGAGGGCT  3720
AGGGCTTAATG TGAGCTGGGT TTGTGGGGAG TTCCTTAATA TTCTCAAGTT CTGGGCACAC  3780
AGGGTTAATG AGTCTCTTGC CCACTGGTCC ACTTGGGGGT CTAGACCAGG ATTATAGAGG  3840
ACACAGCAAG TGAGTCCTCC CCACTCTGGG CTTGTGCACA CTGACCCAGA CCCACGTGTTT  3900
CCCCACCCTT CTCTCCTTTC CTCATCCTAA GTGCCTGGCA GATGAAGGAG TTTTCAGGAG  3960
CTTTTGACAC TATATAAACC GCCCTTTTTG TATGCACCAC GGGCGGCTTT TATATGTAAT  4020
TGCAGCGTGG GGTGGGTGGG CATGGGAGGT AGGGGTGGGC CCTGGAGATG AGGAGGGTGG  4080
GCCATCCTTA CCCCACACTT TTATTGTTGT CGTTTTTTGT TTGTTTTGTT TTTTTGTTTT  4140
TGTTTTTGTT TTTACACTCG CTGCTCTCAA TAAATAAGCC TTTTTTA
```

Seq ID NO: 534 <u>Protein sequence</u>
Protein Accession #: NP_002812

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1         11        21        31        41        51
|         |         |         |         |         |
MGAARGSPAR PRRLPLLSVL LLPLLGGTQT AIVFIKQPSS QDALQGRRAL LRCEVEAPGP   60
VHVYWLLDGA PVQDTERRFA QGSSLSFAAV DRLQDSGTFQ CVARDDVTGE EARSANASFN  120
IKWIEAGPVV LKHPASEAEI QPQTQVTLRC HIDGHPRPTY QWFRDGTPLS DGQSNHTVSS  180
KERNLTLRPA GPEHSGLYSC CAHSAFGQAC SSQNFTLSIA DESFARVVLA PQDVVVARYE  240
EAMFHCQFSA QPPPSLQWLF EDETPITNRS RPPHLRRATV FANGSLLLTQ VRPRNAGIYR  300
CIGQGQRGPP IILEATLHLA EIEDMPLFEP RVFTAGSEER VTCLPPKGLP EPSVWWEHAG  360
VRLPTHGRVY QKGHELVLAN IAESDAGVYT CHAANLAGQR RQDVNITVAT VPSWLKKKPQD  420
SQLEEGKPGY LDCLTQATPK PTVVWYRNQM LISEDSRFEV FKNGTLRINS VEVYDGTWYR  480
CMSSTPAGSI EAQARVQVLE KLKFTPPPQP QQCMEFDKEA TVPCSATGRE KPTIKWERAD  540
GSSLPEWVTD NAGTLHPARV TRDDAGNYTC IASNGPQGQI RAHVQLTVAV FITFKVEPER  600
TTVYQGHTAL LQCEAQGDPK PLIQWKGKDR ILDPTKLGPR MHIFQNGSLV IHDVAPEDSG  660
RYTCIAGNSC NIKHTEAPLY VVDKPVPEES EGPGSPPPYK MIQTIGLSVG AAVAYIIAVL  720
GLMFYCKKRC KAKRLQKQPE GEEPEMECLN GGPLQNGQPS AEIQEEVALT SLGSGPAATN  780
KRHSTSDKMH FPRSSLQPIT TLGKSEFGEV FLAKAQGLEE GVAETLVLVK SLQTKDEQQQ  840
LDFRRELEMF GKLNHANVVR LLGLCREAEP HYMVLEYVDL GDLKQFLRIS KSKDEKLKSQ  900
PLSTKQKVAL CTQVALGMEH LSNNRFVHKD LAARNCLVSA QRQVKVSALG LSKDVYNSEY  960
YHFRQAWVPL RWMSPEAILE GDFSTKSDVW AFGVLMWEVF THGEMPHGGQ ADDEVLADLQ 1020
AGKARLPQPE GCPSKLYRLM QRCWALSPKD RPSFSEIASA LGDSTVDSKP
```

Seq ID NO: 535 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_013952
Coding sequence: 161..1357

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1         11        21        31        41        51
|         |         |         |         |         |
TTCAGAAGGA GGAGAGACAC CGGGCCCAGG GCACCCTCGC GGGCGGGCGG ACCCAAGCAG   60
TGAGGGCCTG CAGCCGGCCG GCCAGGGCAG CGGCAGGCGC GGCCCGGACC TACGGGAGGA  120
AGCCCCGAGC CCTCGGCGGG CTGCGAGCGA CTCCCCGGGG ATGCCTCACA ACTCCATCAG  180
ATCTGGCCAT GGAGGGCTGA ACCAGCTGGG AGGGGCCTTT GTGAATGGCA GACCTCTGCC  240
GGAAGTGGTC CGCCAGCGCA TCGTAGACCT GGCCCACCAG GGTGTAAGGC CCTGCGACAT  300
CTCTCGGCCAG CTCCGCGTCA GCCATGGCTG CGTCAGCAAG ATCCTTGGCA GGTACTACGA  360
GACTGGCAGC ATCCGGCCTG GAGTGATAGG GGGCTCCAAG CCCAAGGTGG CCACCCCCAA  420
GGTGGTGGAG AAGATTGGGG ACTACAAACG CCAGAACCCT ACCATGTTTG CCTGGGAGAT  480
CCGAGACCGG CTCCTGGCTG AGGGCGTCTG TGACAATGAC ACTGTGCCCA GTGTCAGCTC  540
CATTAATAGA ATCATCCGGA CCAAAGTGCA GCAACCATTC AACCTCCCTA TGGACAGCTG  600
CGTGGCCACC AAGTCCCTGA GTCCCGGACA CACGCTGATC CCCAGCTCAG CTGTAACTCC  660
CCCGGAGTCA CCCCAGTCGG ATTCCCTGGG CTCCACCTAC TCCATCAATG GGCTCCTGGG  720
CATCGCTCAG CCTGGCAGCG ACAAGAGGAA AATGGATGAC AGTGATCAGG ATAGCTGCCG  780
ACTAAGCATT GACTCACAGA GCAGCAGCAG CGGACCCCGA AAGCACCTTC GCACGGATGC  840
CTTCAGCCAG CACCACCTCG AGCCGCTCGA GTGCCCATTT GAGCGGCAGC ACTACCCAGA  900
GGGCTATGCC TCCCCCAGCC ACACCAAAGG CGAGCAGGGC CTCTACCCGC TGCCCTTGCT  960
CAACAGCACC CTGACGACCG GGAAGGCCAC CCTGACCCCT TCCAACACGC CACTGGGGCG 1020
CAACCTCTCG ACTCACCAGA CCTACCCCGT GGTGGCAGCT CCGCCCTTTT GGATCTGCAG 1080
CAAGTCGGCT CCGGGGTCCC GCCCTTCAAT GCCTTTCCCC ATGCTGCCTC CGTGTACGGG 1140
CAGTTCACGG GCCAGGCCCT CCTCTCAGGG CGAGAGATGG TGGGGCCCAC GCTGCCCGGA 1200
TACCCACCCC ACATCCCCAC CAGCGGACAG GGCAGCTATG CCTCCTCTGC CATCGCAGGC 1260
ATGGTGGCAG GAAGTGAATA CTCTGGCAAT GCCTATGCGC ACACCCCCTA CTCCTCCTAC 1320
AGCGAGGCCT GGGGCTTCCC CAACTCCAGC TTGCTGAGTT CCCCATATTA TTACAGTTCC 1380
ACATCAAGGC CGAGTGCACC GCCCACCACT GCCACGGCCT TTGACCATCT GTAGTTGCCA 1440
TGGGGACAGT G
```

1160

Seq ID NO: 536 <u>Protein sequence</u>
Protein Accession #: NP_039246

```
  1          11         21         31         41         51
  |          |          |          |          |          |
MPHNSIRSGH GGLNQLGGAF VNGRPLPEVV RQRIVDLAHQ GVRPCDISRQ LRVSHGCVSK   60
ILGRYYETGS IRPGVIGGSK PKVATPKVVE KIGDYKRQNP TMFAWEIRDR LLAEGVCDND  120
TVPSVSSINR IIRTKVQQPF NLPMDSCVAT KSLSPGHTLI PSSAVTPPES PQSDSLGSTY  180
SINGLLGIAQ PGSDKRKMDD SDQDSCRLSI DSQSSSSGPR KHLRTDAFSQ HHLEPLECPF  240
ERQHYPEAYA SPSHTKGEQG LYPLPLLNST LDDGKATLTP SNTPLGRNLS THQTYPVVAA  300
PPFWICSKSA PGSRPSMPFP MLPPCTGSSR ARPSSQGERW WGPRCPDTHP TSPPADRAAM  360
PPLPSQAWWQ EVNTLAMPMA TPPTPPTARP GASPTPAC
```

Seq ID NO: 537 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_003466.1
Coding sequence: 11..1363

```
  1          11         21         31         41         51
  |          |          |          |          |          |
GAATTCGGCG ATGCCTCACA ACTCCATCAG ATCTGGCCAT GGAGGGCTGA ACCAGCTGGG   60
AGGGGCCTTT GTGAATGGCA GACCTCTGCC GGAAGTGGTC CGCCAGCGCA TCGTAGACCT  120
GGCCCACCAG GGTGTAAGGC CCTGCGACAT CTCTCGCCAG CTCCGCGTCA GCCATGGTTG  180
CGTCAGCAAG ATCCTTGGCA GGTACTACGA GACTGGCAGC ATCCGGCCTG GAGTGATAGG  240
GGGCTCCAAG CCCAAGGTGG CCACCCCCAA GGTGGTGGAG AAGATTGGGG ACTACAAACG  300
CCAGAACCCT ACCATGTTTG CCTGGGAGAT CCGAGACCGG CTCCTGGCTG AGGGCGTCTG  360
TGACAATGAC ACTGTGCCCA GTGTCAGCTC CATTAATAGA ATCATCCGGA CCAAAGTGCA  420
GCAACCATTC AACCTCCCTA TGGACAGCTG CGTGGCCACC AAGTCCCTGA GTCCCGGACA  480
CACGCTGATC CCCAGCTCAG CTGTAACTCC CCCGGAGTCA CCCCAGTCGG ATTCCCTGGG  540
CTCCACCTAC TCCATCAATG GGCTCCTGGG CATCGCTCAG CCTGGCAGCG ACAAGAGGAA  600
AATGGATGAC AGTGATCAGG ATAGCTGCCG ACTAAGCATT GACTCACAGA GCAGCAGCAG  660
CGGACCCCGA AAGCACCTTC GCACGGATGC CTTCAGCCAG CACCACCTCG AGCCGCTCGA  720
GTGCCCATTT GAGCGGCAGC ACTACCCAGA GGCCTATGCC TCCCCCAGCC ACACCAAAGG  780
CGAGCAGGGC CTCTACCCGC TGCCCTTGCT CAACAGCACC CTGGACGACG GGAAGGCCAC  840
CCTGACCCCT TCCAACACGC CACTGGGGCG CAACCTCTCG ACTCACCAGA CCTACCCCGT  900
GGTGGCAGAT CCTCACTCAT CCTTCGCCAT AAAGCAGGAA ACCCCCGAGG TGTCCAGTTC  960
TAGCTCCACC CCTTCCTCTT TATCTAGCTC CGCCTTTTTG GATCTGCAGC AAGTCGGCTC 1020
CGGGGTCCCG CCCTTCAATG CCTTTCCCCA TGCTGCCTCC GTGTACGGGC AGTTCACGGG 1080
CCAGGCCCTC CTCTCAGGGC GAGAGATGGT GGGGCCCACG CTGCCCGGAT ACCCACCCCA 1140
CATCCCCACC AGCGGGACAGG GCAGCTATGC CTCCTCTGCC ATCGCAGGCA TGGTGGCAGG 1200
AAGTGAATAC TCTGGCAATG CCTATGGCCA CACCCCCTAC TCCTCCTACA GCGAGGCCTG 1260
GCGCTTCCCC AACTCCAGCT TGCTGAGTTC CCCATATTAT TACAGTTCCA CATCAAGGCC 1320
GAGTGCACCG CCCACCACTG CCACGGCCTT TGACCATCTG TAGTTGAAGC TT
```

Seq ID NO: 538 <u>Protein sequence</u>
Protein Accession #: NP_003457

```
  1          11         21         31         41         51
  |          |          |          |          |          |
MPHNSIRSGH GGLNQLGGAF VNGRPLPEVV RQRIVDLAHQ GVRPCDISRQ LRVSHGCVSK   60
ILGRYYETGS IRPGVIGGSK PKVATPKVVE KIGDYKRQNP TMFAWEIRDR LLAEGVCDND  120
TVPSVSSINR IIRTKVQQPF NLPMDSCVAT KSLSPGHTLI PSSAVTPPES PQSDSLGSTY  180
SINGLLGIAQ PGSDKRKMDD SDQDSCRLSI DSQSSSSGPR KHLRTDAFSQ HHLEPLECPF  240
ERQHYPEAYA SPSHTKGEQG LYPLPLLNST LDDGKATLTP SNTPLGRNLS THQTYPVVAD  300
PHSPFAIKQE TPEVSSSSST PSSLSSSAFL DLQQVGSGVP PFNAFPHAAS VYGQFTGQAL  360
LSGREMVGPT LPGYPPHIPT SGQGSYASSA IAGMVAGSEY SGNAYGHTPY SSYSEAWRFP  420
NSSLLSSPYY YSSTSRPSAP PTTATAFDHL
```

Seq ID NO: 539 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_006799
Coding sequence: 19..963

```
  1          11         21         31         41         51
  |          |          |          |          |          |
GCCGCGGGAG AGGAGGCCAT GGGCGCGCGC GGGGCGCTGC TGCTGGCGCT GCTGCTGGCT   60
CGGGCTGGAC TCAGGAAGCC GGAGTCGCAG GAGGCGGCGC CGTTATCAGG ACCATGCGGC  120
CGACGGGTCA TCACGTCGCG CATCGTGGGT GGAGAGGACG CCGAACTCGG GCGTTGGCCG  180
TGGCAGGGGA GCCTGCGCCT GTGGGATTCC CACGTATGCG GAGTGAGCCT GCTCAGCCAC  240
CGCTGGGCAC TCACGGCCGGC GCACTGCTTT GAAACCTATA GTGACCTTAG TGATCCCTCC  300
GGGTGGATGG TCCAGTTTGG CCAGCTGACT TCCATGCCAT CCTTCTGGAG CCTGCAGGCC  360
TACTACACCC GTTACTTCGT ATCGAATATC TATCTGAGCC CTCGCTACCT GGGGAATTCA  420
CCCTATGACA TTGCCTTGGT GAAGCTGTCT GCACCTGTCA CCTACACTAA ACACATCCAG  480
CCCATCTGTC TCCAGGCCTC CACATTTGAG TTTGAGAACC GGACAGACTG CTGGGTGACT  540
GGCTGGGGGT ACATCAAAGA GGATGAGGCA CTGCCATCTC CAGCACCCT CCAGGAAGTT  600
CAGGTCGCCA TCATAAACAA CTCTATGTGC AACCACCTCT TCCTCAAGTA CAGTTTCCGC  660
AAGGACATCT TTGGAGACAT GGTTTGTGCT GGCAATGCCC AAGGCGGGAA GGATGCCTGC  720
TTCGGTGACT CAGGTGGACC CTTGGCCTGT AACAAGAATG GACTGTGGTA TCAGATTGGA  780
GTCGTGAGCT GGGGAGTGGG CTGTGGTCGG CCCAATCGGC CCGGTGTCTA CACCCAATATC  840
AGCCACCACT TTGAGTGGAT CCAGAAGCTG ATGGCCCAGA GTGGCATGTC CCAGCCAGAC  900
CCCTCCTGGC CGCTACTCTT TTTCCCTCTT CTCTGGGCTC TCCCACTCCT GGGGCCGGTC  960
TGAGCCTACC TGAGCCCATG CAGCCTGGGG CCACTGCCAA GTCAGGCCCT GGTTCTCTTC 1020
TGTCTTGTTT GGTAATAAAC ACATTCCAGT TGATGCCTTG CAGGGCATTC TTCAAAA
```

Seq ID NO: 540 <u>Protein sequence</u>
Protein Accession #: NP_006790

```
         1         11         21         31         41         51
         |          |          |          |          |          |
 5       MGARGALLLA LLLARAGLRK PESQEAAPLS GPCGRRVITS RIVGGEDAEL GRWPWQGSLR    60
         LWDSHVCGVS LLSHRWALTA AHCFETYSDL SDPSGWMVQF GQLTSMPSFW SLQAYYTRYF   120
         VSNIYLSPRY LGNSPYDIAL VKLSAPVTYT KHIQPICLQA STFEFENRTD CWVTGWGYIK   180
         EDEALPSPHT LQEVQVAIIN NSMCNHLFLK YSFRKDIFGD MVCAGNAQGG KDACFGDSGG   240
         PLACNKNGLW YQIGVVSWGV GCGRPNRPGV YTNISHHFEW IQKLMAQSGM SQPDPSWPLL   300
10       FPPLLWALPL LGPV
```

Seq ID NO: 541 DNA sequence
Nucleic Acid Accession #: NM_014344
Coding sequence: 131..1444

```
15       1         11         21         31         41         51
         |          |          |          |          |          |
         GCGGCCGCGA TGGGGCCGAA GCGCCCGAAG CCCCGGAGCC CACAAACTGC CGGGCCCGCC    60
         TCGCCGCCGG GACCCGGGTG CCTGGGCTCG GCTTGAAGCG GCGGCGGCGC ACCGGCACAG   120
         CCGCGGGAGC ATGGGCAGGA GGATGCGGGG CGCCGCCGCC ACCGGCGGGC TCTGGCTGCT   180
20       GGCGCTGGGC TCGCTGCTGG CGCTGTGGGG AGGGCTCCTG CCGCCGCGGA CCGAGCTGCC   240
         CGCCTCCCGG CCGCCCGAAG ACCGACTCCC ACGGCCGCCG GCCCGGAGCG GCGGCCCCGC   300
         GCCCGCGCCT CGCTTCCCTC TGCCCCCGCC CCTGGCGTGG GACGCCCGCG CCCGGCAGTC   360
         GAAAACTTTC CGGGCGCTGC TCACCCTGGC GGCCGGCGCG GACGGCCCGC CCCGGCAGTC   420
         CCGGAGCGAG CCCAGGTGGC ACGTGTCAGC CAGGCAGCCC CGGCCGGAGG AGAGCGCCGC   480
25       GGTGCACGGG GGCGTCTTCT GGAGCCGCGG CCTGGAGGAG CAGGTGCCCC CGGGCTTTTC   540
         GGAGGCCCAG GCGGCGGCGT GGCTGGAGGC GGCTCGCGGC GCCCGGATGG TGGCCCTGGA   600
         GCGCGGGGGT TGCGGGCGCA GCTCCAACCG ACTGGCCCGT TTTGCCGACG GCACCCGCGC   660
         CTGCGTGCGC TACGGCATCA ACCCGGAGCA GATTCAGGGC GAGGCCCTGT CTTACTATCT   720
         GGCGCGCCTG CTGGGGCCTCC AGCGCCACGT GCCGCCGCTG GCACTGGCTC GGGTGGAGGC   780
30       TCGGGGCGCG CAGTGGGCGC AGGTGCAGGA GGAGCTGCGC GCTGCGCACT GGACCGAGGG   840
         CAGCGTGGTG AGCCTGACAC GCTGGCTGCC CAACCTCACG GACGTGGTGG TGCCCGCGCC   900
         CTGGCGCTCG GAGGACGGCC GTCTGCGCCC CCTCCGGGAT GCCGGGGGTG AGCTGGCCAA   960
         CCTCAGCCAG GCGGAGCTGG TGGACCTAGT ACAATGGACC GACTTAATCC TTTTCGACTA  1020
         CCTGACGGCC AACTTCGACC GGCTCGTAAG CAACCTCTTC AGCCTGCAGT GGGACCCGCG  1080
35       CGTCATGCAG CGTGCCACCA GCAACCTGCA CCGCGGTCCG GGCGGGGCGC TGGTCTTTCT  1140
         GGACAATGAG GCGGGCTTGG TGCACGGCTA CCGGGTAGCA GGCATGTGGG ACAAGTATAA  1200
         CGAGCCGCTG TTGCAGTCAG TGTGCGTGTT CCGCGAGCGG ACGGCCCGCG GCGTCCTGGA  1260
         GCTGCACCGC GGACAGGACG CCGCGGCCCG GCTGCTGCGC CTCTACCGGC GCCACGAGCC  1320
         TCGCTTCCCC GAGCTGGCCG CCCTTGCAGA CCCCCACGCT CAGCTGCTAC AGCGCCGCCT  1380
40       CGACTTCCTC GCCAAGCACA TTTTGCACTG TAAGGCCAAG TACGGCCGCC GGTCTGGGAC  1440
         TTAGTGTCAC CGGGAGGAAA AGAGAGAGAT CTGGGGCTGG GGTGATGGATG ATGGGGGGAA  1500
         GGGCGGTCGC CTCTGCCACT GTCAGGGACC AGCCGGCCAA CGCCCACCCG CAAAGGTGTC  1560
         TAAAAACTTC AGCTTTTCAC CCACCTGCCC CTTTCTTTCA ATCCCACGCT GTTTCCTTTC  1620
         AAAGTTCTGG GAGGACGAAC TCACCGAGGC GAGAAGTGTA ACATTCTCTC CACCCAGCTT  1680
45       ATAAAAGGAT TCTTTACTGT GCCAGCACGG GGATTGGATC CGAAGAAACT GGCTACTGGG  1740
         GTTTGGCCCC CGAGTGGCCG TCCCTGTGGG AGATGCACCC CATTCTTGGG CCCCCCTCAT  1800
         TCCCTTTCCG AAAAAGGAAA ACTTGCGTTT GAGCCGTTGA GCTAATTCTG CAATTTTCTA  1860
         CCAAACAGAG CGCTGGTGGC CCCGGAGCAG GGCTGTGACA TTGGCTGGTG GAGCCCCTTC  1920
         CTGTGTTCTC CCTTTGTTCC AGCGCCGCGA TGGTGAGATC ACTGTTCCAA GCAGGGGGAC  1980
50       GGCTCGCGAT AGGACAAAGA GAGCAGGACC TCCAGACTCT GGGGAGCCCT GCAGACCTTG  2040
         ACAATTTGCC TGACTCATTC CTGACCTCTT GTCATTTTGG CCTGAAGGCT ACAAATTCAG  2100
         GGTCAGCTGT ATGCACTAAG TCAAATAATG AATTTCTTCC TCCCTCTCGC AACCGACCAA  2160
         AATTTTGACA ACGATGATGT TCACCAGAAG GAAAAAAAAA TCAGTTTTAT GCACTTTATT  2220
         TTGTTTTGAT TTTCATTTTT TATTAAGAAA AAATTTTATT TTACAGAATT TACCTTCTCT  2280
55       GTATATATGT GCATAAAGTG TGGTGTAAAT ATACTAAACA AACTTATATT TCAATAAAAG  2340
         GGAGTTTAAA ATTTAAAAAA AAAAAAA
```

Seq ID NO: 542 Protein sequence
Protein Accession #: NP_055159

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         1         11         21         31         41         51
         |          |          |          |          |          |
         MGRRMRGAAA TAGLWLLALG SLLALWGGLL PPRTELPASR PPEDRLPRRP ARSGGPAPAP    60
65       RPPLPPPLAW DARGGSLKTP RALLTLAAGA DGPPRQSRSE PRWHVSARQP RPEESAAVHG   120
         GVFWSRGLEE QVPPGFSEAQ AAAWLEAARG ARMVALERGG CGRSSNRLAR FADGTRACVR   180
         YGINPEQIQG EALSYYLARL LGLQRHVPPL ALARVEARGA QWAQVQEELR AAHWTEGSVV   240
         SLTRWLPNLT DVVVPAPWRS EDGRLRPLRD AGGELANLSQ AELVDLVQWT DLILFDYLTA   300
         NFDRLVSNLF SLQWDPRVMQ RATSNLHRGP GGALVFLDNE AGLVHGYRVA GMWDKYNEPL   360
         IQSVCVFRER TARRVLELHR GQDAAARLLR LYRRHEPRFP ELAALADPHA QLLQRRLDPL   420
70       AKHILHCKAK YGRRSGT
```

Seq ID NO: 543 DNA sequence
Nucleic Acid Accession #: XM_007652.4
Coding sequence: 1..1290

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75       1         11         21         31         41         51
         |          |          |          |          |          |
         ATGGCCGGCT CTGGCGCGTG GAAGCGCCTC AAATCTATGC TAAGGAAGGA TGATGCGCCG    60
80       CTGTTTTTAA ATGACACCAG CGCCTTTGAC TTCTCGGATG AGGCGGGGGA CGAGGGGCTT   120
         TCTCGGTTCA ACAAACTTCG AGTTGTGGTG GCCGATGACG GTTCCGAAGC CCCGGAAAGG   180
         CCTGTTAACG GGGCGCACCC GACCCTCCAG GCCGACGATG ATTCCTTACT GGACCAAGAC   240
         TTACCTTTGA CCAACAGTCA GCTGAGTTTG AAGGTGGACT CCTGTGACAA CTGCAGCAAA   300
         CAGAGAGAGA TACTGAAGCA GAGAAAGGTG AAAGCCAGGT TGACCATTGG TGCCGTTCTG   360
         TACTTGCTTT TCATGATTGG AGAACTTGTA GGTGGATACA TTGCAAATAG CCTAGCAATC   420
```

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ATGACAGATG CACTTCATAT GTTAACTGAC CTAAGCGCCA TCATACTCAC CCTGCTTGCT  480
TTGTGGCTAT CATCAAAATC ACCAACCAAA AGATTCACCT TTGGATTTCA TCGCTTAGAG  540
GTTTTGTCAG CTATGATTAG TGTGCTGTTG GTGTATATAC TTATGGGATT CCTCTTATAT  600
GAAGCTGTGC AAAGAACTAT CCATATGAAC TATGAAATAA ATGGAGATAT AATGCTCATC  660
ACCGCAGCTG TTGGAGTTGC AGTTAATGTA ATAATGGGGT TTCTGTTGAA CCAGTCTGGT  720
CACCGTCACT CCCATTCCCA CTCCCTGCCT TCAAATTCCC CTACCAGAGG TTCTGGGTGT  780
GAACGTAACC ATGGGCAGGA TAGCCTGGCA GTGAGAGCTG CATTTGTACA TGCTTTGGGA  840
GATTTGGTAC AGAGTGTTGG TGTGCTAATA GCTGCATACA TCATACGATT CAAGCCAGAA  900
TACAAGATTG CTGATCCCAT CTGTACATAC GTATTTTCAT TACTTGTGGC TTTTACAACA  960
TTTCGAATCA TATGGGATAC AGTAGTTATA ATACTAGAAG GTGTGCCAAG CCATTTGAAT 1020
GTAGACTATA TCAAAGAAGC CTTGATGAAA ATAGAAGATG TATATTCAGT CGAAGATTTA 1080
AATATCTGGT CTCTCACTTC AGGAAAATCT ACTGCCATAG TTCACATACA GCTAATTCCT 1140
GGAAGTTCAT CTAAATGGGA GGAAGTACAG TCCAAAGCAA ACCATTTATT ATTGAACACA 1200
TTTGGCATGT ATAGATGTAC TATTCAGCTT CAGAGTTACA GGCAAGAAGT GGACAGAACT 1260
TGTGCAAATT GTCAGAGTTC TAGTCCCTGA
```

Seq ID NO: 544 <u>Protein sequence</u>
Protein Accession #: XP_007652.1

```
1          11         21         31         41         51
|          |          |          |          |          |
|          |          |          |          |          |
MAGSGAWKRL KSMLRKDDAP LFLNDTSAFD PSDEAGDEGL SRFNKLRVVV ADDGSEAPER  60
PVNGAHPTLQ ADDDSLLDQD LPLTNSQLSL KVDSCDNCSK QREILKQRKV KARLTIAAVL 120
YLLFMIGELV GGYIANSLAI MTDALHMLTD LSAIILTLLA LWLSSKSPTK RFTFGFHRLE 180
VLSAMISVLL VYILMGFLLY EAVQRTIHMN YEINGDIMLI TAAVGVAVNV IMGFLLNQSG 240
HRHSHSRSLP SNSPTRGSGC ERNHGQDSLA VRAAFVHALG DLVQSVGVLI AAYIIRFKPE 300
YKIADPICTY VFSLLVAFTT PRIIWDTVVI ILEGVPSHLN VDYIKEALMK IEDVYSVEDL 360
NIWSLTSGKS TAIVHIQLIP GSSSKWEEVQ SKANHLLLNT FGMYRCTIQL QSYRQEVDRT 420
CANCQSSSP
```

Seq ID NO: 545 <u>DNA sequence</u>
Nucleic Acid Accession #: AB037765.1
Coding sequence: 1..2478

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1          11         21         31         41         51
|          |          |          |          |          |
|          |          |          |          |          |
ATGTTTTCCG GCTTCAATGT CTTTAGAGTT GGGATCTCTT TTGTCATAAT GTGCATTTTT  60
TACATGCCAA CAGTAAACTC TTTACCAGAA CTGAGTCCTC AGAAATATTT TAGTACATTG 120
CAACCAGGAA AAGCCTCTTT AGCTTATTTT TGTCAAGCTG ATTCCCCAAG AACATCTGTA 180
TTTCTTGAAG AACTGAATGA GGCTGTTAGA CCTCTGCAGG ACTATGGAAT TTCAGTTGCC 240
AAGGTTAATT GTGTCAAAGA AGAAAATATCA AGATACTGTG GAAAAGAAAA GGATTTGATG 300
AAAGCATATT TATTCAAGGG CAACATATTG CTCAGAGAAT TCCCTACTGA CACCTTGTTT 360
GATGTGAATG CCATTGTCGC CCATGTTCTC TTTGCTCTTC TTTTTAGTGA AGTGAAAATAT 420
ATTACCAACC TGGAAGACCT TCAGAACATA GAAAATGCTC TGAAAGGAAA AGCAAATAT 480
ATATTCTCAT ATGTAAGAGC CATTGGAATA CCAGAGCACA GAGCAGTCAT GGAAGCCGCT 540
TTTGTGTATG GGACTACATA CCAATTTGTC TTAACCACAG AAATTGCCCT TTTGGAAAGT 600
ATTGGCTCTG AGGATGTGGA ATATGCACAT CTCTACTTTT TTCATTGTAA ACTAGTCTTG 660
GACTTGACCC AGCAATGTAG AAGAACACTA ATGGAACAGC CATTGCTCAC ACTGAACATT 720
CACCTGTTTA TTAAGACAAT GAAAGCCACCT CTGTTGACTG AAGTTGCTGA AGATCCTCAA 780
CAAGTTTCAA CTGTCCATCT CCAACTGGGC TTACCACTGG TTTTTATTGT TAGCCAACAG 840
GCTACTTATG AAGCTGATAG AAGAACTGCA GAATGGGTTG CTTGGCCGTCT TCTGGGAAAA 900
GCAGGAGTTC TACTCTTGTT AAGGGACTCT TTGGAAGTGA ACATTCCTCA AGATGCTAAT 960
GTGGTCTTCA AAAGAGCAGA AGAGGGAGTT CCAGTGGAAT TTTTGGTATT ACATGATGTT 1020
GATTTAATAA TATCTCATGT GGAAAATAAT ATGCACATTG AGGAAATACA AGAAGATGAA 1080
GACAATGACA TGGAAGGTCC AGATATAGAT GTTCAGGATG ATGAAGTGGC AGAAACTGTT 1140
TTCAGAGATA GGAAGAGAAA ATTACCTTTG GAACTTACAG TGGAACTAAC AGAAGAAACA 1200
TTTAATGCAA CAGTGATGGC TTCTGACAGC ATAGTACTCT TCTATGCTGG TTGGCAAGCA 1260
GTATCCATGG CATTTTTGCA ATCCTATATT GATGTGGCAG TTAAACTGAA AGGCACATCT 1320
ACTATGCTTC TTACTAGAAT AAAACTGTGCA GATTGGTCTG ATGTATGTAC TAAGCAAAAT 1380
GTTACTGAAT TTCCTATCAT AAAGATGTAC AAGAAAGGCG AGAACCCAGT ATCTTATGCT 1440
GGAATGTTAG GAACCGAAGA TCTCCTAAAA TTTATCCAGC TCAACAGGAT TTCATATCCA 1500
GTGAATATAA CATCGATCCA AGAAGCAGAA GAATATTTAA GTGGGGAATT ATATAAAGAC 1560
CTCATCTTGT ATTCTAGTGT GTCAGTATTG GGACTATTTA GTCCAACCAT GAAAACAGCA 1620
AAAGAAGATT TTAGTGAAGC AGGAAACTAC CTAAAAGGAT ATGTTATCAC TGGAATTTAT 1680
TCTGAAGAAG ATGTTTTGCT ACTGTCAACC AAATATGCTG CAAGTCTTCC AGCCCTGCTG 1740
CTTCCAGAC ACACAGAAGG CAAAATAGAG AGCATCCCAC TAGCTAGCAC ACATGCACAA 1800
GACATAGTTC AAATAATAAC AGATGCACTA CTGGAAATGT TTCCGGAAAT CACTGTGGAA 1860
AATCTTCCCA GTTATTTCAG ACTTCAGAAA CCATTATTGA TTTTGTTCAG TGATGGCACT 1920
GTAAATCCTC AGTATAAAAA AGCAATATTG ACACTGGTAA AGCAGAAATA CTTGAGGGCA 1980
TTTACTCCAT GCTGGTTAAA TCTAAAGAAT ACTCCAGTGG GGAGAGGAAT CTTGAGGGCA 2040
TATTTTGATC CTCTGCCTCC CCTTCCTCTT CTTGTTTTGG TGAATCTGCA TTCAGGTGGC 2100
CAAGTATTTG CATTTCCTTC AGACCAGGCT ATAATTGAAG AAAACCTTGT ATTGTGGCTG 2160
AAGAAATTAG AAGCAGGACT AGAAAAATCAT ATCACAATTT TACCTGCTCA AGAATGGAAA 2220
CCTCCTCTTC CAGCTTATGT TTTTCTAAGT ATGATAGATG CCGCAACATC TCAACGTGGC 2280
ACTAGGAAAG TTCCCAAGTG TATGAAAGAA ACAGATGTGC AGGAGAATGA TAAGGAACAA 2340
CATGAAGATA AATCGGCAGT CAGAAAAGAA CCGATTGAAA CTCTCGAGAAT AAAGCATTGG 2400
AATAGAAGTA ATTGGTTTAA AGAAGCAGAA AAATCATTTA GACGTGATAA AGAGTTAGGA 2460
TGCTCAAAAG TGAACTAA
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Seq ID NO: 546 <u>Protein sequence</u>
Protein Accession #: BAA92582.1

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1          11         21         31         41         51
|          |          |          |          |          |
|          |          |          |          |          |
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MFSGFNVFRV GISFVIMCIF YMPTVNSLPE LSPQKYFSTL QPGKASLAYF CQADSPRTSV   60
FLEELNEAVR PLQDYGISVA KVNCVKEEIS RYCGKEKDLM KAYLFKGNIL LREFPTDTLF   120
DVNAIVAHVL FALLLFSEVKY ITNLEDLQNI ENALKGKANI IFSYVRAIGI PEHRAVMEAA   180
FVYGGTTYQFV LTTEIALLES IGSEDVEYAH LYFFHCKLVL DLTQQCRRTL MEQPLTTLNI   240
HLFIKTMKAP LLTEVAEDPQ QVSTVHLQLG LPLVFIVSQQ ATYEADRRTA EWVAWRLLGK   300
AGVLLLLRDS LEVNIPQDAN VVFKRAEEGV PVEFLVLHDV DLIISHVENN MHIEEIQEDE   360
DNDMEGPDID VQDDEVAETV FRDRKRKLPL ELTVELTEET FNATVMASDS IVLFYAGWQA   420
VSMAFLQSYI DVAVKLKGTS TMLLTRINCA DWSDVCTKQN VTEFPIIKMY KKGENPVSYA   480
GMLGTEDLLK FIQLNRISYP VNITSIQEAE EYLSGELYKD LILYSSVSVL GLFSPTMKTA   540
KEDFSEAGNY LKGYVITGIY SEEDVLLLST KYAASLPALL LARHTEGKIE SIPLASTHAQ   600
DIVQIITDAL LEMFPEITVE NLPSYFRLQK PLLILFSDGT VNPQYKKAIL TLVKQKYLDS   660
FTPCWLNLKN TPVGRGILRA YFDPLPPLPL LVLVNLHSGG QVFAFPSDQA IIEENLVLWL   720
KKLEAGLENH ITILPAQEWK PPLPAYDFLS MIDAATSQRG TRKVPKCMKE TDVQENDKEQ   780
HEDKSAVRKE PIETLRIKHW NRSNWFKEAE KSFRRDKELG CSKVN
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Seq ID NO: 547 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_033102.1
Coding sequence: 1..1662

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 1         11        21        31        41        51
 |         |         |         |         |         |
ATGGTCCAGA GGCTGTGGGT GAGCCGCCTG CTGCGGCACC GGAAAGCCCA GCTCTTGCTG   60
GTCAACCTGC TAACCTTTGG CCTGGAGGTG TGTTTGGCCG CAGGCATCAC CTATGTGCCG   120
CCTCTGCTGC TGGAAGTGGG GGTAGAGGAG AAGTTCATGA CCATGGTGCT GGGCATTGGT   180
CCAGTGCTGG GCCTGGTCTG TGTCCCGCTC CTAGGCTCAG CCAGTGACCA CTGGCGTGGA   240
CGCTATGGCC GCCGCCGGCC CTTCATCTGG GCACTGTCCT TGGGCATCCT GCTGAGCCTC   300
TTTCTCATCC CAAGGGCCGG CTGGCTAGCA GGGCTGCTGT GCCCGGATCC CAGGCCCCTG   360
GAGCTGGCAC TGCTCATCCT GGGCGTGGGG CTGCTGGACT TCTGTGGCCA GGTGTGCTTC   420
ACTCCACTGG AGGCCCTGCT CTCTGACCTC TTCCGGGACC CGGACCACTG TCGCCAGGCC   480
TACTCTGTCT ATGCCTTCAT GATCAGTCTT GGGGGCTGCC TGGGCTACCT CCTGCCTGCC   540
ATTGACTGGG ACACCAGTGC CCTGGCCCCC TACCTGGGCA CCCAGGAGGA GTGCCTCTTT   600
GGCCTGCTCA CCCTCATCTT CCTCACCTGC GTAGCAGCCA CACTGCTGGT GGCTGAGGAG   660
GCAGCGCTGG GCCCCACCGA GCCAGCCAGA GGGCTGTCGG CCCCCTCCTT GTCGCCCCAC   720
TGCTGTCCAT GCCGGGCCCG CTTGGCTTTC CGGAACCTGG GCGCCCTGCT TCCCCGGCTG   780
CACCAGCTGT GCTGCCGCAT GCCCCGCACC CTGCGCCGGC TCTTCGTGGC TGAGCTGTGC   840
AGCTGGATGG CACTCATGAC CTTCACGCTG TTTTACACGG ATTTCGTGGG CGAGGGGCTG   900
TACCAGGGCG TGCCCAGAGC TGAGCCGGGC ACCGAGGCCC GGAGACACTA TGATGAAGGC   960
GTTCGGATGG GCAGCCTGGG GCTGTTCCTG CAGTGCGCCA TCTCCCTGGT CTTCTCTCTG   1020
GTCATGGACC GGCTGGTGCA GCGATTCGGC ACTCGAGCGA TCTATTTGGC CAGTGTGGCA   1080
GCTTTCCCTG TGGCTGCCGG TGCCACATGC CTGTCCCACA GTGTGGCCGT GGTGACAGCT   1140
TCAGCCGCCC TCACCGGGTT CACCTTCTCA GCCCTGCAGA TCCTGCCCTA CACACTGGCC   1200
TCCCTCTACC ACCGGGAGAA GCAGGTGTTC CTGCCCAAAT ACCGAGGGGA CACTGGAGGT   1260
GCTAGCAGTG AGGACAGCCT GATGACCAGC TTCCTGCCAG GCCCTAAGCC TGGAGCTCCC   1320
TTCCCTAATG GACACGTGGG TGCTGGAGGC AGTGGCCTGC TCCCACCTCC ACCGGCGCTC   1380
TGCGGGGCCT CTGCCTGTGA TGTCTCCGTA CGTGTGGTGG TGGGTGAGCC CACCGAGGCC   1440
AGGGTGGTTC CGGGCCGGGG CATCTGCCTG GACCTGGCCA TCCTGGATAG TGCCTTCCTG   1500
CTGTCCCAGG TGGCCCCATC CCTGTTTATG GGCTCCATTG TCCAGTCTCAG CCAGTCTGTC   1560
ACTGCCTATA TGGTGTCTGC CGCAGGCCTG GGTCTGGTCG CCATTTACTT TGCTACACAG   1620
GTAGTATTTG ACAAGAGCGA CTTGGCCAAA TACTCAGCGT GA                     1662
```

Seq ID NO: 548 <u>Protein sequence</u>
Protein Accession #: NP_149093.1

```
 1         11        21        31        41        51
 |         |         |         |         |         |
MVQRLWVSRL LRHRKAQLLL VNLLTFGLEV CLAAGITYVP PLLLEVGVEE KFMTMVLGIG   60
PVLGLVCVPL LGSASDHWRG RYGRRRPFIW ALSLGILLSL FLIPRAGWLA GLLCPDRPPL   120
ELALLILGVG LLDFCGQVCF TPLEALLSDL FRDPDHCRQA YSVYAFMISL GGCLGYLLPA   180
IDWDTSALAP YLGTQEECLF GLLTLIFLTC VAATLLVAEE AALGPTEPAE GLSAPSLSPH   240
CCPCRARLAF RNLGALLPRL HQLCCRMPRT LRRLFVAELC SWMALMTFTL FYTDFVGEGL   300
YQGVPRAEPG TEARRHYDEG VRMGSLGLFL QCAISLVFSL VMDRLVQRFG TRAVYLASVA   360
AFPVAAGATC LSHSVAVVTA SAALTGFTFS ALQILPYTLA SLYHREKQVF LPKYRGDTGG   420
ASSEDSLMTS FLPGPKPGAP PPNGHVGAGG SGLLPPPPAL CGASACDVSV RVVVGEPTEA   480
RVVPGRGICL DLAILDSAFL LSQVAPSLFM GSIVQLSQSV TAYMVSAAGL GLVAIYFATQ   540
VVFDKSDLAK YSA
```

Seq ID NO: 549 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1389

```
 1         11        21        31        41        51
 |         |         |         |         |         |
ATGGGCTACC AGAGGCAGGA GCCTGTCATC CCGCCGCAGA GAGATTTAGA TGACAGAGAA   60
ACCCTTGTTT CTGAACATGA GTATAAAGAG AAAACCTGTC AGTCTGCTGC TCTTTTTAAT   120
GTTGTCAACT CGATTATAGG ATCTGGTATA ATAGGATTGC CTTATTCAAT GAAGCAAGCT   180
GGGTTTCCTT TGGGAAATATT GCTTTTATTC TGGGTTTCAT ATGTTACGGA CTTTTCCCTT   240
GTTTTATTGA TAAAAGGAGG GGCCCTCTCT GGAACAGATA CCTACCAGTC TTTGGTCAAT   300
AAAACTTTCG GCTTTCCAGG GTATCTGCTC CTCTCTGTTC TTCAGTTTTT GTATCCTTTT   360
ATAGCAATGA TAAGTTACAA TATAATAGCT GGAGATACTT TGAGCAAAGT TTTTCAAAGA   420
ATCCCAGGAG TTGATCCTGA AAACGTGTTT ATTGGTCGCC ACTTCATTAT TGGACTTTCC   480
ACAGTTACCT TTACTCTGCC TTTATCCTTG TACCGAAATA TAGCAAAGCT TGGAAAGGTC   540
TCCCTCATCT CTACAGGTTT AACAACTCTG ATTCTTGGAA TTGTAATGGC AAGGGCAATT   600
TCACTGGGTC CACACATACC AAAAACAGAA GACGCTTGGG TATTTGCAAA GCCCAATGCC   660
ATTCAAGCGG TCGGGGTTAT GTCTTTTGCA TTTATTTGCC ACCATAACTC CTTCTTAGTT   720
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TACAGTTCTC TAGAAGAACC CACAGTAGCT AAGTGGTCCC GCCTTATCCA TATGTCCATC   780
GTGATTTCTG TATTTATCTG TATATTCTTT GCTACATGTG GATACTTGAC ATTTACTGGC   840
TTCACCCAAG GGGACTTATT TGAAAATTAC TGCAGAAATG ATGACCTGGT AACATTTGGA   900
AGATTTTGTT ATGGTGTCAC TGTCATTTTG ACATACCCTA TGGAATGCTT TGTGACAAGA   960
GAGGTAATTG CCAATGTGTT TTTTGGTGGG AATCTTTCAT CGGTTTTCCA CATTGTTGTA  1020
ACAGTGATGG TCATCACTGT AGCCACGCTT GTGTCATTGC TGATTGATTG CCTCGGGATA  1080
GTTCTAGAAC TCAATGGTGT GCTCTGTGCA ACTCCCCTCA TTTTTATCAT TCCATCAGCC  1140
TGTTATCTGA AACTGTCTGA AGAACCAAGG ACACACTCCG ATAAGATTAT GTCTTGTGTC  1200
ATGCTTCCCA TTGGTGCTGT GGTGATGGTT TTTGGATTCG TCATGGCTAT TACAAATACT  1260
CAAGACTGCA CCCATGGGCA GGAAATGTTC TACTGCTTTC CTGACAATTT CTCTCTCACA  1320
AATACCTCAG AGTCTCATGT TCAGCAGACA ACACAACTTT CTACTTTAAA TATTAGTATC  1380
TTTCAATGA
```

Seq ID NO: 550 Protein sequence
Protein Accession #: Eos sequence

```
1         11        21        31        41        51
|         |         |         |         |         |
MGYQRQEPVI PPQRDLDDRE TLVSEHEYKE KTCQSAALFN VVNSIIGSGI IGLPYSMKQA   60
GPPLGILLLF WVSYVTDFSL VLLIKGGALS GTDTYQSLVN KTFGFPGYLL LSVLQFLYPF  120
IAMISYNIIA GDTLSKVFQR IPGVDPENVF IGRHFIIGLS TVTPTLPLSL YRNIAKLGKV  180
SLISTGLTTL ILGIVMARAI SLGPHIPKTE DAWVFAKPNA IQAVGVMSFA FICHHNSFLV  240
YSSLEEPTVA KWSRLIHMSI VISVFICIFF ATCGYLTFTG FTQGDLFENY CRNDDLVTFG  300
RFCYGVTVIL TYPMECFVTR EVIANVFFGG NLSSVFHIVV TVMVITVATL VSLLIDCLGI  360
VLELNGVLCA TPLIFIIPSA CYLRLSEEPR THSDKIMSCV MLPIGAVVMV FGFVMAITNT  420
QDCTHGQEMF YCFPDNFSLT NTSESHVQQT TQLSTLNISI FQ
```

Seq ID NO: 551 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1284

```
1         11        21        31        41        51
|         |         |         |         |         |
ATGGGCTACC AGAGGCAGGA GCCTGTCATC CCGCCGCAGA GAGGATTGCC TTATTCAATG   60
AAGCAAGCTG GGTTTCCTTT GGGAATATTG CTTTTATTCT GGGTTTCATA TGTTACAGAC  120
TTTTCCCTTG TTTTATTGAT AAAAGGAGGG GCCCTCTCTG GAACAGATAC CTACCAGTCT  180
TTGGTCAATA AAACTTTCGG CTTTCCAGGG TATCTGCTCC TCTCTGTTCT TCAGTTTTTG  240
TATCCTTTTA TAGCAATGAT AAGTTACAAT ATAATAGCTG GAGATACTTT GAGCAAAGTT  300
TTTCAAAGAA TCCCAGGAGT TGATCCTGAA AACGTGTTTA TTGGTCGCCA CTTCATTATT  360
GGACTTTCCA CAGTTACCTT TACTCTGCCT TTATCCTTGT ACCGAAATAT AGCAAAGCTT  420
GGAAAGGTCT CCCTCATCTC TACAGGTTTA ACAACTCTGA TTCTTGGAAT TGTAATGGCA  480
AGGGCAATTT CACTGGGTCC ACACATACCA AAAACAGAAG ACGCTTGGGT ATTTGCAAAG  540
CCCAATGCCA TTCAAGCGGT CGGGGTTATG TCTTTTGCAT TTATTTGCCA CCATAACTCC  600
TTCTTAGTTT ACAGTTCTCT AGAAGAACCC ACAGTAGCTA AGTGGTCCCG CCTTATCCAT  660
ATGTCCATCG TGATTTCTGT ATTTATCTGT ATATTCTTTG CTACATGTGG ATACTTGACA  720
TTTACTGGCT TCACCCAAGG GGACTTATTT GAAAATTACT GCAGAAATGA TGACCTGGTA  780
ACATTTGGAA GATTTTGTTA TGGTGTCACT GTCATTTTGA CATACCCTAT GGAATGCTTT  840
GTGACAAGAG AGGTAATTGC CAATGTGTTT TTTGGTGGGA ATCTTTCATC GGTTTTCCAC  900
ATTGTTGTAA CAGTGATGGT CATCACTGTA GCCACGCTTG TGTCATTGCT GATTGATTGC  960
CTCGGGATAG TTCTAGAACT CAATGGTGTG CTCTGTGCAA CTCCCCTCAT TTTTATCATT 1020
CCATCAGCCT GTTATCTGAA ACTGTCTGAA GAACCAAGGA CACACTCCGA TAAGATTATG 1080
TCTTGTGTCA TGCTTCCCAT TGGTGCTGTG GTGATGGTTT TTGGATTCGT CATGGCTATT 1140
ACAAATACTC AAGACTGCAC CCATGGGCAG GAAATGTTCT ACTGCTTTCC TGACAATTTC 1200
TCTCTCACAA ATACCTCAGA GTCTCATGTT CAGCAGACAA CACAACTTTC TACTTTAAAT 1260
ATTAGTATCT TTCAACTCGA GTAA
```

Seq ID NO: 552 Protein sequence
Protein Accession #: Eos sequence

```
1         11        21        31        41        51
|         |         |         |         |         |
MGYQRQEPVI PPQRGLPYSM KQAGFPLGIL LLFWVSYVTD FSLVLLIKGG ALSGTDTYQS   60
LVNKTFGFPG YLLLSVLQFL YPFIAMISYN IIAGDTLSKV FQRIPGVDPE NVPIGRHFII  120
GLSTVTPTLP LSLYRNIAKL GKVSLISTGL TTLILGIVMA RAISLGPHIP KTEDAWVPAK  180
PNAIQAVGVM SFAFICHHNS FLVYSSLEEP TVAKWSRLIH MSIVISVFIC IFFATCGYLT  240
FTGFTQGDLF ENYCRNDDLV TFGRFCYGVT VILTYPMECF VTREVIANVF FGGNLSSVFH  300
IVVTVMVITV ATLVSLLIDC LGIVLELNGV LCATPLIPII PSACYLRLSE EPRTHSDKIM  360
SCVMLPIGAV VMVFGFVMAI TNTQDCTHGQ EMFYCFPDNF SLTNTSESHV QQTTQLSTLN  420
ISIFQLE
```

Seq ID NO: 553 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1203

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1         11        21        31        41        51
|         |         |         |         |         |
ATGGGCTACC AGAGGCAGGA GCCTGTCATC CCGCCGCAGT TTTCCCTTGT TTTATTGATA   60
AAAGGAGGGG CCCTCTCTGG AACAGATACC TACCAGTCTT TGGTCAATAA AACTTTCGGC  120
TTTCCAGGGT ATCTGCTCCT CTCTGTTCTT CAGTTTTTGT ATCCTTTTAT AGCAATGATA  180
AGTTACAATA TAATAGCTGG AGATACTTTG AGCAAAGTTT TTCAAAGAAT CCCAGGAGTT  240
GATCCTGAAA ACGTGTTTAT TGGTCGCCAC TTCATTATTG GACTTTCCAC AGTTACCTTT  300
ACTCTGCCTT TATCCTTGTA CCGAAATATA GCAAAGCTTG GAAAGGTCTC CCTCATCTCT  360
ACAGGTTTAA CAACTCTGAT TCTTGGAATT GTAATGGCAA GGGCAATTTC ACTGGGTCCA  420
CACATACCAA AAACAGAAGA CGCTTGGGTA TTTGCAAAGC CCAATGCCAT TCAAGCGGTC  480
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1165

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GGGGTTATGT CTTTTGCATT TATTTGCCAC CATAACTCCT TCTTAGTTTA CAGTTCTCTA    540
GAAGAACCCA CAGTAGCTAA GTGGTCCCGC CTTATCCATA TGTCCATCGT GATTTCTGTA    600
TTTATCTGTA TATTCTTTGC TACATGTGGA TACTTGACAT TTACTGGCTT CACCCAAGGG    660
GACTTATTTG AAAATTACTG CAGAAATGAT GACCTGGTAA CATTTGGAAG ATTTTGTTAT    720
GGTGTCACTG TCATTTTGAC ATACCCTATG GAATGCTTTG TGACAAGAGA GGTAATTGCC    780
AATGTGTTTT TTGGTGGGAA TCTTTCATCG GTTTTCCACA TTGTTGTAAC AGTGATGGTC    840
ATCACTGTAG CCACGCTTGT GTCATTGCTG ATTGATTGCC TCGGGATAGT TCTAGAACTC    900
AATGGTGTGC TCTGTGCAAC TCCCCTCATT TTTATCATTC CATCAGCCTG TTATCTGAAA    960
CTGTCTGAAG AACCAAGGAC ACACTCCGAT AAGATTATGT CTTGTGTCAT GCTTCCCATT   1020
GGTGCTGTGG TGATGGTTTT TGGATTCGTC ATGGCTATTA CAAATACTCA AGACTGCACC   1080
CATGGGCAGG AAATGTTCTA CTGCTTTCCT GACAATTTCT CTCTCACAAA TACCTCAGAG   1140
TCTCATGTTC AGCAGACAAC ACAACTTTCT ACTTTAAATA TTAGTATCTT TCAACTCGAG   1200
TAA
```

Seq ID NO: 554 <u>Protein sequence</u>
Protein Accession #: Eos sequence

```
1          11         21         31         41         51
|          |          |          |          |          |
MGYQRQEPVI PPQFSLVLLI KGGALSGTDT YQSLVNKTFG FPGYLLLSVL QFLYPFIAMI    60
SYNIIAGDTL SKVFQRIPGV DPENVFIGRH PIIGLSTVTP TLPLSLYRNI AKLGKVSLIS   120
TGLTTLILGI VMARAISLGP HIPKTEDAWV PAKPNAIQAV GVMSFAPICH HNSFLVYSSL   180
EEPTVAKWSR LIHMSIVISV FICIFFATCG YLTFTGFPTQG DLFENYCRND DLVTFGRFCY   240
GVTVILTYPM ECFVTREVIA NVFFGGNLSS VFHIVVTVMV ITVATLVSLL IDCLGIVLEL   300
NGVLCATPLI FIIPSACYLK LSEEPRTHSD KIMSCVMLPI GAVVMVFGFV MAITNTQDCT   360
HGQEMFYCFP DNFSLTNTSE SHVQQTTQLS TLNISIFQLE
```

Seq ID NO: 555 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1140

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1          11         21         31         41         51
|          |          |          |          |          |
ATGGGCTACC AGAGGCAGGA GCCTGTCATC CCGCCGCAGG TCAATAAAAC TTTCGGCTTT    60
CCAGGGTATC TGCTCCTCTC TGTTCTTCAG TTTTTGTATC CTTTTATAGC AATGATAAGT   120
TACAATATAA TAGCTGGAGA TACTTTGAGC AAAGTTTTTC AAAGAATCCC AGGAGTTGAT   180
CCTGAAAACG TGTTTATTGG TCGCCACTTC ATTATTGGAC TTTCCACAGT TACCTTTACT   240
CTGCCTTTAT CCTTGTACCG AAATATAGCA AAGCTTGGAA AGGTCTCCCT CATCTCTACA   300
GGTTTAACAA CTCTGATTCT TGGAATTGTA ATGGCAAGGG CAATTTCACT GGGTCCACAC   360
ATACCAAAAA CAGAAGACGC TTGGGTATTT GCAAAGCCCA ATGCCATTCA AGCGGTCGGG   420
GTTATGTCTT TTGCATTTAT TTGCCACCAT AACTCCTTCT TAGTTTACAG TTCTCTAGAA   480
GAACCCACAG TAGCTAAGTG GTCCGCCTT ATCCATATGT CCATCGTGAT TTCTGTATTT   540
ATCTGTATAT TCTTTGCTAC ATGTGGATAC TTGACATTTA CTGGCTTCAC CCAAGGGGAC   600
TTATTTGAAA ATTACTGCAG AAATGATGAC CTGGTAACAT TTGGAAGATT TTGTTATGGT   660
GTCACTGTCA TTTTGACATA CCCTATGGAA TGCTTTGTGA CAAGAGAGGT AATTGCCAAT   720
GTGTTTTTTG GTGGGAATCT TTCATCGGTT TTCCACATTG TTGTAACAGT GATGGTCATC   780
ACTGTAGCCA CGCTTGTGTC ATTGCTGATT GATTGCCTCG GGATAGTTCT AGAACTCAAT   840
GGTGTGCTCT GTGCAACTCC CCTCATTTTT ATCATTCCAT CAGCCTGTTA TCTGAAACTG   900
TCTGAAGAAC CAAGGACACA CTCCGATAAG ATTATGTCTT GTGTCATGCT TCCCATTGGT   960
GCTGTGGTGA TGGTTTTTGG ATTCGTCATG GCTATTACAA ATACTCAAGA CTGCACCCAT   1020
GGGCAGGAAA TGTTCTACTG CTTTCCTGAC AATTTCTCTC TCACAAATAC CTCAGAGTCT   1080
CATGTTCAGC AGACAACACA ACTTTCTACT TTAAATATTA GTATCTTTCA ACTCGAGTAA
```

Seq ID NO: 556 <u>Protein sequence</u>
Protein Accession #: Eos sequence

```
1          11         21         31         41         51
|          |          |          |          |          |
MGYQRQEPVI PPQVNKTFGF PGYLLLSVLQ FLYPFIAMIS YNIIAGDTLS KVFQRIPGVD    60
PENVFIGRHF IIGLSTVTFT LPLSLYRNIA KLGKVSLIST GLTTLILGIV MARAISLGPH   120
IPKTEDAWVF AKPNAIQAVG VMSFAPICHH NSFLVYSSLE EPTVAKWSRL IHMSIVISVF   180
ICIFFATCGY LTFTGFPTQGD LFENYCRNDD LVTFGRFCYG VTVILTYPME CFVTREVIAN   240
VFFGGNLSSV FHIVVTVMVI TVATLVSLLI DCLGIVLELN GVLCATPLIF IIPSACYLKL   300
SEEPRTHSDK IMSCVMLPIG AVVMVFGFVM AITNTQDCTH GQEMFYCFPD NFSLTNTSES   360
HVQQTTQLST LNISIFQLE
```

Seq ID NO: 557 <u>DNA sequence</u>
Nucleic Acid Accession #: XM_057188.1
Coding sequence: 769..4269

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1          11         21         31         41         51
|          |          |          |          |          |
ATGGGATTGC CTCTCCCTCT CACTCTGGGC TTCTGTCCCA CTCTTATCTT AGTGTCAGTC    60
CTCCCCCAAG TCTGTGTCCC TCTCTCTCCC CTAAATCTCT GGCCCTCCT TTCTGAGTTC   120
CTGCCCTTCC CCCAATTCTT TGGTTTTTGC ATCCCCCTCT GCCCCTTGCC TCAGTCAAGT   180
CTCCCCTGTG TGTCTCTCTC CCCCCGGCCC GGACCTCTGC ACCCCCCAGG TCGCTGTCCC   240
TCTGTCCCCT TATCGCGGCC TGGGACCCGC CCTCTCCCCG CCTCCCGCTT TGGCGTCTCC   300
AAGACTCCCG CCCCCCAGA CCTCGCCCCG CCCCAGGCTA GGCTGGAAAG TGGAGGATCC   360
GGTTTGCTCT GGGCGGGTCT GGAAGCAGAG CCGGCGGAGG GAGCGCCGGG GCCCTGGGCT   420
GCAGGAGGTT GCGGCGGCCG CGGCAGCATG GTGGTGCCGG AGAAGGAGCA GAGCTGGATC   480
CCCAAGATCT TCAAGAAGAA GACCTGCACG ACGTTCATAG TTGACTCCAC AGATCCGGGG   540
GATGGGGTCT CGCTCTATTG CCCAGGCTGT TCTCAAACTC CTGGGCTCAA GCAGTCCTTC   600
TGCCTTGACC TCCCAAAGTG CTTGGATTGT GCCCAGCCGT CCTTGAAGTT TTGCTCAGAA   660
GAGCAAACTT TCTGGGAAGT AGCTGCAGGT GTTGGAAGTA GCTGCAGGGG AACTAGGGGA   720
```

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TTCAAGGATG GAGCTGAAAT GGGTGAACGG ACAAAGTCGG TAAACTGAAT GGAGGATGCC    780
TTCGGGGCAG CCGTGGTGAC CGTGTGGGAC AGCGATGCAC ACACCACGGA GAAGCCCACC    840
GATGCCTACG GAGAGCTGGA CTTCACGGGG GCCGGCCGCA AGCACAGCAA TTTCCTCCGG    900
CTCTCTGACC GAACGGATCC AGCTGCAGTT TATAGTCTGG TCACACGCAC ATGGGGCTTC    960
CGTGCCCCGA ACCTGGTGGT GTCAGTGCTG GGGGGATCGG GGGGCCCCGT CCTCCAGACC   1020
TGGCTGCAGG ACCTGCTGCG TCGTGGGCTG GTGCGGGCTG CCCAGAGCAC AGGAGCCTGG   1080
ATTGTCACTG GGGGTCTGCA CACGGGCATC GGCCGGCATG TTGGTGTGGC TGTACGGGAC   1140
CATCAGATGG CCAGCACTGG GGGCACCAAG GTGGTGGCCA TGGGTGTGGC CCCCTGGGGT   1200
GTGGTCCGGA ATAGAGACAC CCTCATCAAC CCCAAGGGCT CGTTCCCTGC GAGGTACCGG   1260
TGGCGCGGTG ACCCGGAGGA CGGGGTCCAG TTTCCCCTGG ACTACAACTA CTCGGCCTTC   1320
TTCCTGGTGG ACGACGGCAC ACACGGCTGC CTGGGGGGCG AGAACCGCTT CCGCTTCGCG   1380
CTGGAGTCCT ACATCTCACA GCAGAAGACG GGCGTGGGAG GGACTGGAAT TGACATCCCT   1440
GTCCTGCTCC TCCTGATTGA TGGTGATGAG AAGATGTTGA CGCGAATAGA GAACGCCACC   1500
CAGGCTCAGC TCCCATGTCT CCTCGTGGCT GGCTCAGGGG GAGCTGCGGA CTGCCTGGCG   1560
GAGACCCTGG AAGACACTCT GGCCCCAGGG AGTGGGGGAG CCAGGCAAGG CGAAGCCCGA   1620
GATCGAATCA GGCGTTTCTT TCCCAAAGGG GACCTTGAGG TCCTGCAGGC CAGGTGGAG    1680
AGGATTATGA CCCGGAAGGA GCTCCTGACA GTCTATTCTT CTGAGGATGG GTCTGAGGAA   1740
TTCGAGACCA TAGTTTTGAA GGCCCTTGTG AAGGCCTGTG GGAGCTCGGA GGCCTCAGCC   1800
TACCTGGATG AGCTGCGTTT GGCTGTGGCT TGGAACCGCG TGGACATTGC CCAGAGTGAA   1860
CTCTTTCGGG GGGACATCCA ATGGCGGTCC TTCCATCTCG AAGCTTCCCT CATGGACGCC   1920
CTGCTGAATG ACCGGCCTGA GTTCGTGCGC TTGCTCATTT CCCACGGCCT CAGCCTGGGC   1980
CACTTCCTGA CCCCGATGCG CCTGGCCCAA CTCTACAGCG CGGCGCCCTC CAACTCGCTC   2040
ATCCGCAACC TTTTGGACCA GGCGTCCCAC AGCGGCAGGCA CCAAAGCCCC AGCCCTAAAA   2100
GGGGGAGCTG CGGAGCTCCG GCCCCCTGAC GTGGGGCATG TGCTGAGGAT GCTGCTGGGG   2160
AAGATGTGCG CGCCGAGGTA CCCCTCCGGG GGCGCCTGGG ACCCTCACCC AGGCCAGGGC   2220
TTCGGGGAGA GCATGTATCT GCTCTCGGAC AAGGCCACCT CGCCGCTCTC GCTGGATGCT   2280
GGCCTCGGGC AGGCCCCCTG GAGCGACCTG CTTCTTTGGG CACTGTTGCT GAACAGGGCA   2340
CAGATGGCCA TGTACTTCTG GGAGATGGGT TCCAATGCAG TTTCCTCAGC TCTTGGGGCC   2400
TGTTTGCTGC TCCGGGTGAT GGCACGCCTG GAGCCTGACG CTGAGGAGGC AGCACGGAGG   2460
AAAGACCTGG CGTTCAAGTT TGAGGGGATG GGCGTTGACC TCTTTGGCGA GTGCTATCGC   2520
AGCAGTGAGG TGAGGGCTGC CCGCCTCCTC CTCCGTCGCT GCCCGCTCTG GGGGGATGGC   2580
ACTTGCCTCC AGCTGGCCAT GCAAGCTGAC GCCCGTGCCT TCTTTGCCCA GGATGGGGTA   2640
CAGTCTCTGC TGACACAGAA GTGGTGGGGA GATATGGCCA GCACTACACC CATCTGGGCC   2700
CTGGTTCTCG CCTTCTTTTG CCCTCCACTC ATCTACACCC GCCTCATCAC CTTCAGGAAA   2760
TCAGAAGAGG AGCCCACACG GGAGGAGCTA GAGTTTGACA TGGATAGTGT CATTAATGGG   2820
GAAGGGCCTG TCGGGACGGC GGACCCAGCC GAGAAGACGC CGCTGGGGGT CCCGCGCCAG   2880
TCGGGCCGTC CGGGTTGCTG CGGGGGCCGC TGCGGGGGGC GCCGGTGCCT ACGCCGCTGG   2940
TTCCACTTCT GGGGCGCGCG CGGTGACCATC TTCATGGGGCA ACGTGGTCAG CTACCTGCTG   3000
TTCCTGCTGC TTTTCTCGCG GGTGCTGCTC GTGGATTTCC AGCCGGCGCC GCCCGGCTCC   3060
CTGGAGCTGC TGCTCTATTT CTGGGCTTTC ACGCTGCTGT GCGAGGAACT GCGCCAGGGC   3120
CTGAGCGGAG GCGGGGGCAG CCTCGCCAGC GGGGGCCCCG GGCCTGGCCA TGCCTCACTG   3180
AGCCAGCGCC TGCGCCTCTA CCTCGCCGAC AGCTGGAACC AGTGCGACCT AGTGGCTCTC   3240
ACCTGCTTCC TCCTGGGCGT GGGCTGCCGG CTGACCCCGG GTTTGTACCA CCTGGGCCGC   3300
ACTGTCCTCT GCATCGACTT CATGGTTTTC ACGGTGCGGC TGCTTCACAT CTTCACGGTC   3360
AACAAACAGC TGGGGCCCAA GATCGTCATC GTGAGCAAGA TGATGAAGGA CGTGTTCTTC   3420
TTCCTCTTCT TCCTCGGCGT GTGGCTGGTA GCCTATGGCC TGGCCACGGA GGGGCTCCTG   3480
AGGCCACGGG ACAGTGACTT CCAAGTATCC CTGCGCCGCG TCTTCTACCG TCCCTACCTG   3540
CAGATCTTCG GGCAGATTCC CCAGGAGGAC ATGGACGTGG CCCTCATGGA GCACAGCAAC   3600
TGCTCGTCGG AGCCCGGCTT CTGGGCACAC CCTCCTGGGG CCCAGGCGGG CACCTGCGTC   3660
TCCCAGTATG CCAACTGGCT GGTGGTGCTG CTCCTCGTCA TCTTCCTGCT CGTGGCCAAC   3720
ATCCTGCTGG TCAACCTTGCT CATTGCCATG TTCAGTTACA CATTCGGCAA AGTACAGGGC   3780
AACAGCGATC TCTACTGGAA GGCGCAGCGT TACCGCCTCA TCCGGGAATT CCACTCTCGG   3840
CCCGCGCTGG CCCCGCCCTT TATCGTCATC TCCCACTTGC GCCTCCTGCT CAGGCAATTG   3900
TGCAGGCGAC CCCGGAGCCC CCAGCCGTCC TCCCCGGCCC TCGAGCATTT CGGGGTTTAC   3960
CTTTCTAAGG AAGCCGAGCG GAAGCGCTA ACGTGGGAAT CGGTGCATAA GGAGAACTTT   4020
CTGCTGGCAC GCGCTAGGGA CAAGCGGGAG AGCGACTCCG AGCGTCTGAA GCGCACGTCC   4080
CAGAAGGTGG ACTTGGCACT GAAACAGCTG GGACACATCC GCGAGTACGA ACAGCGCCTG   4140
AAAGTGCTGG AGCGGGAGGT CCAGCAGTGT AGCGCGCGTCC TGGGGTGGGT GGCCGAGGCC   4200
CTGAGCCGCT CTGCCTTGCT GCCCCCAGGT GGGCCGCCAC CCCCTGACCT GCCTGGGTCC   4260
AAAGACTGAG CCCTGCTGGC GGACTTCAAG GAGAAGCCCC CACAGGGGAT TTTGTCCTA    4320
GAGTAAGGCT CATCTGGGGC TCGGCCCCCG CACCTGGTGG CCTTGTCCTT GAGGTGAGCC   4380
CCATGTCCAT CTGGGCCACT GTCAGGACCA CCTTTGGGAG TGTCATCCTT ACAAACCACA   4440
GCATGCCCGG CTCCTCCCAG AACCAGTCCC AGCCTGGGAG GATCAAGGCC TGGATCCCGA   4500
GCCGTTATCC ATCTGGAGGC TGCAGGGTCC TTGGGGTAAC AGGGACCACA GACCCCTCAC   4560
CACTCACAGA TTCCTCACAC TGGGGAAATA AAGCCATTTC AGAGGAAAAA AAAAAAAAAA   4620
AAAAAAAAAA AAAAAAAAAA A
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Seq ID NO: 558 _Protein sequence_
Protein Accession #: XP_057188.1

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1          11         21         31         41         51
|          |          |          |          |          |
MEDAFGAAVV TVWDSDAHTT EKPTDAYGEL DFTGAGRKHS NFLRLSDRTD PAAVYSLVTR    60
THGFRAPNLV VSVLGGSGGP VLQTWLQDLL RRGLVRAAQS TGAWIVTGGL HTGIGRHVGV   120
AVRDHQMAST GGTKVVAMGV APWGVVRNRD TLINPKGSFP ARYRWRGDPE DGVQFPLDYN   180
YSAFFLVDDG THGCLGGENR FRLRLESYIS QQKTGVGGTG IDIPVLLLLI DGDEKMLTRI   240
ENATQAQLPC LLVAGSGGAA DCLAETLEDT LAPGSGGARQ GEARDRIRRF FPKGDLEVLQ   300
AQVERIMTRK ELLTVYSSED GSEEFETIVL KALVKACGSS EASAYLDELR LAVAWNRVDI   360
AQSELFRGDI QWRSFHLEAS LMDALLNDRP EFVRLLISHG LSLGHFLTPM RLAQLYSAAP   420
SNSLIRNLLD QASHSAGTKA PALKGGAAEL RPPDVGHVLR MLLGKMCAPR YPSGGAWDPH   480
PGQGFGESMY LLSDKATSPL SLDAGLGQAP WSDLLLWALL LNRAQMAMYF WEMGSNAVSS   540
ALGACLLLRV MARLEPDAEE AARRKDLAFK FEGMGVDLFG ECYRSSEVRA ARLLLRRCPL   600
WGDATCLQLA MQADARAFFA QDGVQSLLTQ KWWGDMASTT PIWALVLAFF CPPLIYTRLI   660
TFRKSEEEPT REELEFDMDS VINGEGPVGT ADPAEKTPLG VPRQSGRPGC CGGRCGGRRC   720
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LRRWFHFWGA PVTIFMGNVV SYLLFLLLFS RVLLVDFQPA PPGSLELLLY FWAFTLLCEE   780
LRQGLSGGGG SLASGGPGPG HASLSQRLRL YLADSWNQCD LVALTCFLLG VGCRLTPGLY   840
HLGRTVLCID FMVFTVRLLH IFTVNKQLGP KIVIVSKMMK DVFFFLFPLG VWLVAYGVAT   900
EGLLRPRDSD PPSILRRVFY RPYLQIFGQI PQEDMDVALM EHSNCSSEPG FWAHPPGAQA   960
GTCVSQYANW LVVLLLVIFL LVANILLVNL LIAMFSYTFG KVQGNSDLYW KAQRYRLIRE  1020
FHSRPALAPP PIVISHLRLL LRQLCRRPRS PQPSSPALEH FRVYLSKEAE RKLLTWESVH  1080
KENFLLARAR DKRESDSERL KRTSQKVDLA LKQLGHIREY EQRLKVLERE VQQCSRVLGW  1140
VAEALSRSAL LPPGGPPPPD LPGSKD
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Seq ID NO: 559 DNA sequence
Nucleic Acid Accession #: NM_006853.1
Coding sequence: 26..874

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1          11         21         31         41         51
|          |          |          |          |          |
AGGAATCTGC GCTCGGGTTC CGCAGATGCA GAGGTTGAGG TGGCTGCGGG ACTGGAAGTC    60
ATCGGGCAGA GGTCTCACAG CAGCCAAGGA ACCTGGGGCC CGCTCCTCCC CCCTCCAGGC   120
CATGAGGATT CTGCAGTTAA TCCTGCTTGC TCTGGCAACA GGGCTTGTAG GGGGAGAGAC   180
CAGGATCATC AAGGGGTTCG AGTGCAAGCC TCACTCCCAG CCCTGGCAGG CAGCCCTGTT   240
CGAGAAGACG CGGCTACTCT GTGGGGCGAC GCTCATCGCC CCCAGATGGC TCCTGACAGC   300
AGCCCACTGC CTCAAGCCCC GCTACATAGT TCACCTGGGG CAGCACAACC TCCAGAAGGA   360
GGAGGGCTGT GAGCAGACCC GGACAGCCAC TGAGTCCTTC CCCCACCCCG GCTTCAACAA   420
CAGCCTCCCC AACAAAGACC ACCGCAATGA CATCATGCTG GTGAAGATGG CATCGCCAGT   480
CTCCATCACC TGGGCTGTGC GACCCCTCAC CCTCTCCTCA CGCTGTGTCA CTGCTGGCAC   540
CAGCTGCCTC ATTTCCGGCT GGGGCAGCAC GTCCAGCCCC CAGTTACGCC TGCCTCACAC   600
CTTGCGATGC GCCAACATCA CCATCATTGA GCACCAGAAG TGTGAGAACG CCTACCCCGG   660
CAACATCACA GACACCATGG TGTGTGCCAG CGTGCAGGAA GGGGGCAAGG ACTCCTGCCA   720
GGGTGACTCC GGGGGCCCTC TGGTCTGTAA CCAGTCTCTT CAAGGCATTA TCTCCTGGGG   780
CCAGGATCCG TGTGCGATCA CCCGAAAGCC TGGTGTCTAC ACGAAAGTCT GCAAATATGT   840
GGACTGGATC CAGGAGACGA TGAAGAACAA TTAGACTGGA CCCACCCACC ACAGCCCATC   900
ACCCTCCATT TCCACTTGGT GTTTGGTTCC TGTTCACTCT GTTAATAAGA AACCCTAAGC   960
CAAGACCCTC TACGAACATT CTTTGGGCCT CCTGGACTAC AGGAGATGCT GTCACTTAAT  1020
AATCAACCTG GGGTTCGAAA TCAGTGAGAC CTGGATTCAA ATTCTGCCTT GAAATATTGT  1080
GACTCTGGGA ATGACAACAC CTGGTTTGTT CTCTGTTGTA TCCCCAGCCC CAAAGACAGC  1140
TCCTGGCCAT ATATCAAGGT TTCAATAAAT ATTTGCTAAA TGAGTG
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Seq ID NO: 560 Protein sequence
Protein Accession #: NP_006844.1

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1          11         21         31         41         51
|          |          |          |          |          |
MRILQLILLA LATGLVGGET RIIKGFECKP HSQPWQAALF EKTRLLCGAT LIAPRWLLTA    60
AHCLKPRYIV HLGQHNLQKE EGCEQTRTAT ESFPHPGFNN SLPNKDHRND IMLVKMASPV   120
SITWAVRPLT LSSRCVTAGT SCLISGWGST SSPQLRLPHT LRCANITIIE HQKCENAYPG   180
NITDTMVCAS VQEGGKDSCQ GDSGGPLVCN QSLQGIISWG QDPCAITRKP GVYTKVCKYV   240
DWIQETMKNN
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Seq ID NO: 561 DNA sequence
Nucleic Acid Accession #: AY046419.1
Coding sequence: 1..1743

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1          11         21         31         41         51
|          |          |          |          |          |
ATGTTTACCT TCCTGTCATC TGTCACTGCT GCTGTCAGTG GCCTCCTGGT GGGGTTATGAA    60
CTTGGGATCA TCTCTGGGGC TCTTCTTCAG ATCAAAACCT TATTAGCCCC GAGCTGCCAT   120
GAGCAGGAAA TGGTTGTGAG CTCCCTCGTC ATTGGAGCCC TCCTTGCCTC ACTCACCGGA   180
GGGGTCCTGA TAGACAGATA TGGAAGAAGG ACAGCAATCA TCTTGTCATC CTGCCTGCTT   240
GGACTCGGAA GCTTAGTCTT GATCCTCAGT TTATCCTACA CGGTTCTTAT AGTGGGACGC   300
ATTGCCATAG GGGTTTCCAT CTCCCTCTCT TCCATTGCCA CTTGTGTGTTA CATCGCAGAG   360
ATTGCTCCTC AACACGAAG AGGCCTTCTT GTGTCACTGA ATGAGCTGAT GATTGTCATC   420
GGCATTCTTT CTGCCTATAT TTCAAATTAC GCATTTGCCA ATGTTTTCCA TGGCTGGAAG   480
TACATGTTTG GTCTTGTGAT TCCCTTGGGA GTTTTGCAAG CAATTGCAAT GTATTTTCTT   540
CCTCCAAGCC CTCGGTTTCT GGTGATGAAA GGACAAGAGG GAGCTGCTAG CAAGGTTCTT   600
GGAAGGTTAA GAGCACTCTC AGATACAACT GAGGAACTCA CTGTGATCAA ATCCTCCCTG   660
AAAGATGAAT ATCAGTACAG TTTTTGGGAT CTGTTTCGTT CAAAAGACAA CATGCGGACC   720
CGAATAATGA TAGGACTAAC ACTAGTATTT TTTGTACAAA TCACTGGCCA ACCAAACATA   780
TTGTTCTATG CATCAACTGT TTTGAAGTCA GTTGGATTTC AAAGCAATGA GGCAGCTAGC   840
CTCGCCTCCA CTGGGGTTGG AGTCGTCAAG GTCATTAGCA CCATCCCTGC CACTCTTCTT   900
GTAGACCATG TCGGCAGCAA AACATTCCTC TGCATTGGCT CCTCTGTGAT GGCAGCTTCG   960
TTGGTGACCA TGGGCATCGT AAATCTCAAC ATCCACATGA ACTTCACCCA TATCTGCAGA  1020
AGCCACAATT CTATCAACCA GTCCTTGGAT GAGTCTGTGA TTTATGGACC AGGAAACCTG  1080
TCAACCAACA ACAATACTCT CAGAGACCAC TTCAAAGGGA TTTCTTCCCA TAGCAGAAGC  1140
TCACTCATGC CCCTGAGAAA TGATGTGGAT AAGAGAGGGG AGACGACCTC AGCATCCTTG  1200
CTAAATGCTG GATTAAGCCA CACTGAAATAC CAGATAGTCA CAGACCCTGG GGACGTCCCA  1260
GCTTTTTTGA AATGGCTGTC CTTAGCCAGC TTGCTTGTTT ATGTTGCTGC TTTTTCAATT  1320
GGTCTAGGAC CAATGCCCTG GCTGGTGCTC AGCGAGATCT TTCCTGGTGG GATCAGAGGA  1380
CGAGCCATGG CTTTAACTTC TAGCATGAAC TGGGGCATCA ATCTCCTCAT CTCGCTGACA  1440
TTTTTGACTG TAACTGATCT TATTGGCCTG CCATGGGTGT GCTTTATATA TACAATCATG  1500
AGTCTAGCAT CCCTGCTTTT TGTTGTTATG TTTATACCTG AGACAAAGGG ATGCTCTTTG  1560
GAACAAATAT CAATGGAGCT AGCAAAAGTG AACTATGTGA AAAACAACAT TTGTTTTATG  1620
AGTCATCACC AAGAAGAATT AGTGCCAAAA CAGCCTCAAA AAGAAAACC CCAGGAGCAG  1680
CTCCTTGGAGT GTAACAAGCT GTGTGGTAGG GGCCAATCCA GGCAGCTTTC TCCAGAGACC  1740
TAA
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Seq ID NO: 562 <u>Protein sequence</u>
Protein Accession #: AAL02327.1

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1          11         21         31         41         51
|          |          |          |          |          |
MFTFLSSVTA AVSGLLVGYE LGIISGALLQ IKTLLALSCH EQEMVVSSLV IGALLASLTG    60
GVLIDRYGRR TAIILSSCLL GLGSLVLILS LSYTVLIVGR IAIGVSISLS SIATCVYIAE   120
IAPQHRRGLL VSLNELMIVI GILSAYISNY AFANVFHGWK YMFGLVIPLG VLQAIAMYFL   180
PPSPRFLVMK GQEGAASKVL GRLRALSDTT EELTVIKSSL KDEYQYSFWD LFRSKDNMRT   240
RIMIGLTLVP FVQITGQPNI LFYASTVLKS VGFQSNEAAS LASTGVGVVK VISTIPATLL   300
VDHVGSKTFL CIGSSVMAAS LVTMGIVNLN IHMNPTHICR SHNSINQSLD ESVIYGPGNL   360
STNNNTLRDH FKGISSHSRS SLMPLRNDVD KRGETTSASL LNAGLSHTEY QIVTDPGDVP   420
AFLKWLSLAS LLVYVAAFSI GLGPMPWLVL SEIFPGGIRG RAMALTSSMN WGINLLISLT   480
FLTVTDLIGL PWVCFIYTIM SLASLLFVVM FIPETKGCSL EQISMELAKV NYVKNNICFM   540
SHHQEELVPK QPQKRKPQEQ LLECNKLCGR GQSRQLSPET
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Seq ID NO: 563 <u>DNA sequence</u>
Nucleic Acid Accession #: XM_059466.1
Coding sequence: 1..894

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1          11         21         31         41         51
|          |          |          |          |          |
ATGGAGCCGC GGGCGCTCGT CACGGCGCTC AGCCTCGGCC TCAGCCTGTG CTCCCTGGGG    60
CTGCTCGTCA CGGCCCATCTT CACCGACCAC TGGTACGAGA CCGACCCCCG GCGCCACAAG   120
GAGAGCTGCG AGCGCAGCCG CGCGGGCGCC GACCCCCCGG ACCAGAAGAA CCGGCTGATG   180
CCGCTGTCGC ACCTGCCGCT GCGGGACTCG CCCCCGCTGG GGCGCCGGCT GCTCCCGGGC   240
GGCCCGGGGC GCGCCGACCC CGAGTCCTGG CGCTCGCTCC TGGGGCTCGG CGGGCTGGAC   300
GCCGAGTGCG GCCGGCCCCT CTTCGCCACC TACTCGGGCC TCTGGAGGAA GTGCTACTTC   360
CTGGGCATCG ACCGGGACAT CGACACCCTC ATCCTGAAAG GTATTGCGCA GCGATGCACG   420
GCCATCAAGT ACCACTTTTC TCAGCCCATC CGCTTGCGAA ACATTCCTTT TAATTTAACC   480
AAGACCATAC AGCAAGATGA GTGGCACCTG CTTCATTTAA GAAGAATCAC TGCTGGCTTC   540
CTCGGCATGG CCGTAGCCGT CCTTCTCTGC GGCTGCATTG TGGCCACAGT CAGTTTCTTC   600
TGGGAGGAGA GCTTGACCCA GCACGTGGCT GGACTCCTGT TCCTCATGAC AGGGGATATTT   660
TGCACCATTT CCCTCTGTAC TTATGCCGCC AGTATCTCGT ATGATTTGAA CCGGCTCCCA   720
AAGCTAATTT ATAGCCTGCC TGCTGATGTG GAACATGGTT ACAGCTGGTC CATCTTTTGC   780
GCCTGGTGCA GTTTAGGCTT TATTGTGGCA GCTGGAGGTC TCTGCATCGC TTATCCGTTT   840
ATTAGCCGGA CCAAGATTGC ACAGCTAAAG TCTGGCAGAG ACTCCACGGT ATGA          
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Seq ID NO: 564 <u>Protein sequence</u>
Protein Accession #: XP_059466.1

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MEPRALVTAL SLGLSLCSLG LLVTAIFTDH WYETDPRRHK ESCERSRAGA DPPDQKNRLM    60
PLSHLPLRDS PPLGRRLLPG GPGRADPESW RSLLGLGGLD AECGRPLFAT YSGLWRKCYF   120
LGIDRDIDTL ILKGIAQRCT AIKYHFSQPI RLRNIPFNLT KTIQQDEWHL LHLRRITAGF   180
LGMAVAVLLC GCIVATVSFF WEESLTQHVA GLLFLMTGIF CTISLCTYAA SISYDLNRLP   240
KLIYSLPADV EHGYSWSIFC AWCSLGFIVA AGGLCIAYPF ISRTKIAQLK SGRDSTV      
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Seq ID NO: 565 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..3315

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ACCCGGACCC TGTACTCCAG CGCGTCTCAG AGCACAGACT TGTCTTACAG TGAAAGCGAC   120
TTGGTGAATT TTATTCAAGC AAATTTTAAG AAACGAGAAT GTGTCTTCTT TACCAAAGAT   180
TCCAAGGCCA CGGAGAATGT GTGCAAGTGT GGCTATGCCC AGAGCCAGCA CATGGAAGGC   240
ACCCAGATCA ACCAAAGTGA GAAATGGAAC TACAAGAAAC ACACCAAGGA ATTTCCTACC   300
GACGCCTTTG GGGATATTCA GTTTGAGACA CTGGGGAAGA AAGGGAAGTA TATACGTCTG   360
TCCTGCGACA CGGACGCGGA AATCCTTTAC GAGCTGCTGA CCCAGCACTG GCACCTGAAA   420
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ATGCGCAAGA TCTTCAGCCG GCTCATCTAC ATGCGCAGT CCAAAGGTGC TTGGATTCTC   540
ACGGGAGGCA CCCATTATGG CCTGATGAAG TACATCGGGG AGGTGGTGAG AGATAACACC   600
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TCCAACCGGG ACACCCTCAT CAGGAATTGC GATGCTGAGG GCTATTTTTT AGCCCAGTAC   720
CTTATGGATG ACTTCACAAG AGATCCACTG TATATCCTGG ACAACAACCA CACACATTTG   780
CTGCTCGTGG ACAATGGCTG TCATGGACAT CCCACTGTCG AAGCAAAGCT CCGGAATCAG   840
CTAGAGAAGT ATATCTCTGA GCGCACTATT CAAGATTCCA ACTATGGTGG CAAGATCCCC   900
ATTGTGTGTT TTGCCCAAGG AGGTGGAAAA GAGACTTTGA AAGCCATCAA TACCTCCATC   960
AAAAATAAAA TTCCTTGTGT GGTGGTGGAA GGCTCGGGCC ACGCTCGCTGA TGTGATCGCT  1020
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TTTTTACCCC GCACGGTGTC CCGGCTGCCT GAGGAGGAGA CTGAGAGTTG GATCAAATGG  1140
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GATGAAATTG TGAGCAATGC CATCTCCTAC GCTCTATACA AAGCCTTCAG CACCAGTGAG  1260
CAAGACAAGG ATAACTGGAA TGGGCAGCTG AAGCTTCTGC TGGAGTGGAA CCAGCTGGAC  1320
TTAGCCAATG ATGAGATTTT CACCAATGAC CGCCGATGGG AGTCTGCTGA CCTTCAAGAA  1380
GTCATGTTTA CGGCTCTCAT AAAGGACAGA CCCAAGTTTG TCCGCCTCTT TCTGGAGAAT  1440
GGCTTGAACC TACGGAAGTT TCTCACCCAT GATGTCCTCA CTGAACTCTT CTCCAACCAC  1500
TTCAGCACGC TTGTGTACCG GAATCTGCAG ATCGCCAAGA ATTCCTATAA TGATGCCCTC  1560
CTCACGTTTG TCTGGAAACT GGTTGCGAAC TTCCGAAGAG GCTTCCGGAA GGAAGACAGA  1620
AATGGCCGGG ACGAGATGGA CATAGAACTC ACGACGTGT CTCCTATTAC TCGGCACCCC  1680
CTGCAAGCTC TCTTCATCTG GGCCATTCTT CAGAATAAGA AGGAACTCTC CAAAGTCATT  1740
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GTGGAGGCCA CAGACCAGCA TTTCATCGCC CAGCCTGGGG TCCAGAATTT TCTTTCTAAG 2040
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CATTCGGTGC CACACCCCCC CGAGCTGGTC CTGTACTCGC TGGTCTTTGT CCTCTTCTGT 2340
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CAGAGGATGC TGATCGATGT GTTCTTCTTC CTGTTCCTCT TTGCGGTGTG GATGGTGGCC 2640
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CGTTCGGTCA TCTACGAGCC CTACCTGGCC ATGTTCGGCC AGGTGCCCAG TGACGTGGAT 2760
GGTACCACGT ATGACTTTGC CCACTGCACC TTCACTGGGA ATGAGTCCAA GCCACTGTGT 2820
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TACACGGTGG GCACCGTCCA GGAGAACAAT GACCAGGTCT GGAAGTTCCA GAGGTACTTC 3000
CTGGTGCAGG AGTACTGCAG CCGCCTCAAT ATCCCCTTCC CCTTCATCGT CTTCGCTTAC 3060
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AATAAAATCA AATGA
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SCDTDAEILY ELLTQHWHLK TPNLVISVTG GAKNFALKPR MRKIFSRLIY IAQSKGAWIL  180
TGGTHYGLMK YIGEVVRDNT ISRSSEENIV AIGIAAWGMV SNRDTLIRNC DAEGYPLAQY  240
LMDDFTRDPL YILDNNHTHL LLVDNGCHGH PTVEAKLRNQ LEKYISERTI QDSNYGGKIP  300
IVCFAQGGGK ETLKAINTSI KNKIPCVVVE GSGQIADVIA SLVEVEDALT SSAVKEKLVR  360
FLPRTVSRLP EEETESWIKW LKEILECSHL LTVIKMEEAG DEIVSNAISY ALYKAFSTSE  420
QDKDNWNGQL KLLLEWNQLD LANDEIFTND RRWESADLQE VMFTALIKDR PKFVRLFLEN  480
GLNLRKFLTH DVLTELFSNH PSTLVYRNLQ IAKNSYNDAL LTFVWKLVAN FRRGFRKEDR  540
NGRDEMDIEL HDVSPITRHP LQALFIWAIL QNKKELSKVI WEQTRGCTLA ALGASKLLKT  600
LAKVKNDINA AGESEELANE YETRAVELFT ECYSSDEDLA EQLLVYSCEA WGGSNCLELA  660
VEATDQHPIA QPGVQNFLSK QWYGEISRDT KNWKIILCLF IIPLVGCGFV SFRKKPVDKH  720
KKLLWYYVAF FTSPFVVFSW NVVFYIAPLL LFAYVLLMDF HSVPHPPELV LYSLVFVLFC  780
DEVRQWYVNG VNYFTDLWNV MDTLGLFYFI AGIVFRLHSS NKSSLYSGRV IFCLDYIIFT  840
LRLIHIFTVS RNLGPKIIML QRMLIDVPFF LFLFAVWMVA FGVARQGILR QNEQRWRWIF  900
RSVIYEPYLA MFGQVPSDVD GTTYDFAHCT FTGNESKPLC VELDEHNLPR FPEWITIPLV  960
CIYMLSTNIL LVNLLVAMFG YTVGTVQENN DQVWKFQRYF LVQEYCSRLN IPFPFIVPAY 1020
FYMVVKKCFK CCCKEKNMES SVCCFKNEDN ETLAWEGVMK ENYLVKINTK ANDTSEEMRH 1080
RFRQLDTKLN DLKGLLKEIA NKIK
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1          11         21         31         41         51
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CGCGCGCAGA TTGCCATTTG CGGCATGAGC ACCTGGAGCA AAAGGTCTCT GAGCCAGGAA  180
GATGCTCCTC AGACACCTAG ACCAGTGGCA GAAATTGTAC CATCCTTCAT CAACAAAGAT  240
ACAGAAACTA TAATTATCAT GTTGGAATTC ATTGCTAATT TGCCACCGGA GCTGAAGGCA  300
GCCCTATCTG AGAGGCAACC ATCATTACCA GAGCTACAGC AGTATGTACC TGCATTAAAG  360
GATTCCAATC TTAGCTTTGA AGAATTTAAG AAACTTATTC GCAATAGGCA AAGTGAAGCC  420
GCAGACAGCA ATCCTTCAGA ATTAAAATAC TTAGGCTTGG ATACTCATTC TCAAAAAAAG  480
AGACGACCCT ACGTGGCACT GTTTGAGAAA TGTTGCCTAA TTGGTTGTAC CAAAAGGTCT  540
CTTGCTAAAT ATTGCTGA
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1          11         21         31         41         51
|          |          |          |          |          |
MPRLFLFHLL EFCLLLNQFS RAVAAKWKDD VIKLCGRELV RAQIAICGMS TWSKRSLSQE   60
DAPQTPRPVA EIVPSFINKD TETIIIMLEF IANLPPELKA ALSERQPSLP ELQQYVPALK  120
DSNLSFEEFK KLIRNRQSEA ADSNPSELKY LGLDTHSQKK RRPYVALFEK CCLIGCTKRS  180
LAKYC
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Coding sequence: 1..3978

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      CGCGTGTTCT TCTGGTGGCT CAATCCCTTG TTTAAAATTG GCCATAAACG GAGATTAGAG   120
      GAAGATGATA TGTATTCAGT GCTGCCAGAA GACCGCTCAC AGCACCTTGG AGAGGAGTTG   180
      CAAGGGTTCT GGGATAAAGA AGTTTTAAGA GCTGAGAATG ACGCACAGAA GCCTTCTTTA   240
      ACAAGAGCAA TCATAAAGTG TTACTGGAAA TCTTATTTAG TTTTGGGAAT TTTTACGTTA   300
 10   ATTGAGGAAA GTGCCAAAGT AATCCAGCCC ATATTTTTGG GAAAAATTAT TAATTATTTT   360
      GAAAATTATG ATCCCATGGA TTCTGTGGCT TTGAACACAG CGTACGCCTA TGCCACGGTG   420
      CTGACTTTTT GCACGCTCAT TTTGGCTATA CTGCATCACT TATATTTTTA TCACGTTCAG   480
      TGTGCTGGGA TGAGGTTACG AGTAGCCATG TGCCATATGA TTTATCGGAA GGCACTTCGT   540
      CTTAGTAACA TGGCCATGGG GAAGACAACC ACAGGCCAGA TAGTCAATCT GCTGTCCAAT   600
 15   GATGTGAACA AGTTTGATCA GGTGACAGTG TTCTTACACT TCCTGTGGGC AGGACCACTG   660
      CAGGCGATCG CAGTGACTGC CCTACTCTGG ATGGAGATAG GAATATCGTG CCTTGCTGGG   720
      ATGGCAGTTC TAATCATTCT CCTGCCCTTG CAAAGCTGTT TTGGGAAGTT GTTCTCATCA   780
      CTGAGGAGTA AAACTGCAAC TTTCACGGAT GCCAGGATCA GGACCATGAA TGAAGTTATA   840
      ACTGGTATAA GGATAATAAA AATGTACGCC TGGGAAAAGT CATTTTCAAA TCTTATTACC   900
 20   AATTTGAGAA AGAAGGAGAT TTCCAAGATT CTGAGAAGTT CCTGCCTCAG GGGGATGAAT   960
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      CTCCTCGGCA GTGTGATCAC AGCCAGCCGC GTGTTCGTGG CAGTGACGCT GTATGGGGCT  1080
      GTGCGGCTGA CGGTTACCCT CTTCTTCCCC TCAGCCATTG AGAGGGTGTC AGAGGCAATC  1140
      GTCAGCATCC GAAGAATCCA GACCTTTTTG CTACTTGATG AGATATCACA GCGCAACCGT  1200
 25   CAGCTGCCGT CAGATGCTAA AAAGATGGTG CATGTGCAGG ATTTTACTGC TTTTTGGGAT  1260
      AAGGCATCAG AGACCCCAAC TCTACAAGGC CTTTCCTTTA CTGTCAGACC TGGCGAATTG  1320
      TTAGCTGTGG TCGGCCCCGT GGGAGCAGGG AAGTCATCAC TGTTAAGTGC CGTGCTCGGG  1380
      GAATTGGCCC CAAGTCACGG GCTGGTCAGC GTGCATGGAA GAATTGCCTA TGTGTCTCAG  1440
      CAGCCCTGGG TGTTCTCGGG AACTCTGAGG AGTAATATTT TATTTGGGAA GAAATACGAA  1500
 30   AAGGAACGAT ATGAAAAAGT CATAAAGGCT TGTGCTCTGA AAAAGGATTT ACAGCTGTTG  1560
      GAGGATGGTG ATCGACTGT GATAGGAGAT CGGGGAACCA CGCTGAGTGG AGGGCAGAAA  1620
      GCACGGGTAA ACCTTGCAAG AGCAGTGTAT CAAGATGCTG ACATCTATCT CCTGGACGAT  1680
      CCTCTCAGTG CAGTAGATGC GGAAGTTAGC AGACACTTGT TCGAACTGTG TATTTGTCAA  1740
      ATTTTGCATG AGAAGATCAC AATTTTAGTG ACTCATCAGT TGCAGTACCT CAAAGCTGCA  1800
 35   AGTCAGATTC TGATATTGAA AGATGGTAAA ATGGTGCAGA AGGGGACTTA CACTGAGTTC  1860
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      TCTCAACAAT CTTCTAGACC CTCCTTGAAA GATGGTGCTC TGGAGAGCCA AGATACAGGA  2040
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 40   TATAAGAATT ACTTCAGAGC TGGTGCTCAC TGGATTGTCT TCATTTTCCT TATTCTCCTA  2160
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      CTTAACTGGT ACTTAGGAAT TTATTCAGGT TTAACTGTAG CTACCGTTCT TTTTGGCATA  2340
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 45   ATGTTTGAGT CAATTCTGAA AGCTCCGGTA TTATTCTTTG ATAGAAATCC AATAGGAAGA  2460
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      TTAGATTTCA TCCAGACATT GCTACAAGTG GTTGGTGTGG TGTGGCCGTG  2580
      ATTCCTTGGA TCGCAATACC CTTGGTTCCC CTTGGAATCA TTTTCATTTT TCTTCGGCGA  2640
      TATTTTTTGG AAACGTCAAG AGATGTGAAG CGCCTGGAAT CTACAACTCG GAGTCCAGTG  2700
 50   TTTTCCCACT TGTCATCTTC TCTCCAGGGG CTCTGGACCA TCCGGACCA CAAAGCAGAA  2760
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      TTTTTGACAA CGTCCCGCTG GTTCGCCGTC CGTCTGGATG CCATCGTGC CATGTTTGTC  2880
      ATCATCGTTG CCTTTGGGTC CCTGATTCTG GCAAAAACTC TGGATGCCGG GCAGGTTGGT  2940
 55   TTGGCACTGT CCTATGCCCT CACGCTCATG GGGATGTTTC AGTGGTGTGT TCGACAAAGT  3000
      GCTGAAGTTG AGAATATGAT GATCTCAGTA GAAAGGGTCA TTGAATACAC AGACCTTGAA  3060
      AAAGAAGCAC CTTGGGAATA TCAGAAACGC CCACCACCAG CCTGGCCCCA TGAAGGAGTG  3120
      ATAATCTTTG ACAATGTGAA CTTCATGTAC AGTCCAGGTG GGCCTCTGGT ACTGAAGCAT  3180
      CTGACAGCAC TCATTAAATC ACAAGAAAAG GTTGGCATTG TGGGAAGAAC CGGAGCTGGA  3240
 60   AAAAGTTCCC TCATCTCAGC CCTTTTTAGA TTGTCAGAAC CCGAAGGTAA AATTTGGATT  3300
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      CCTCAGGAAC CTGTTTTGTT CACTGGAACA ATGAGGAAAA ACCTGGATCC CTTTAATGAG  3420
      CACACGGATG AGGAACTGTG GAATGCCTTA CAAGAGGTAC AACTTAAAGA AACCATTGAA  3480
      GATCTTCCTG GTAAAATGGA TACTGAATTA GCAGAATCAG GGCCAATTT TAGTGTTGGA  3540
 65   CAAAGACAAC TGGTGTGCCT TGCCAGGGCA ATTCTCAGGA AAAATCAGAT ATTGATTATT  3600
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      GAGAAATTTG CCCACTGCAC CGTGCTAACC ATTGCACACA CATTATTGAC  3720
      AGCGACAAGA TAATGGTTTT AGATTCAGGA AGACTGAAAG AATATGATGA GCCGTATGTT  3780
      TTGCTGCAAA ATAAAGAGAG CCTATTTTAC AAGATGGTGC AACAACTGGG CAAGGCAGAA  3840
 70   GCCGCTGCCC TCACTGAAAC AGCAAAACAG GTATACTTCA AAGAAATTA TCCACATATT  3900
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Seq ID NO: 570 Protein sequence
Protein Accession #: XP_036453.1

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      QGFWDKEVLR AENDAQKPSL TRAIIKCYWK SYLVLGIFTL IEESAKVIQP IFLGKIINYF   120
      ENYDPMDSVA LNTAYAYATV LTFCTLILAI LHHLYFYHVQ CAGMRLRVAM CHMIYRKALR   180
      LSNMAMGKTT TGQIVNLLSN DVNKFDQVTV FLHFLWAGPL QAIAVTALLW MEIGISCLAG   240
      MAVLIILLPL QSCFGKLFSS LRSKTATFTD ARIRTMNEVI TGIRIIKMYA WEKSFSNLIT   300
      NLRKKEISKI LRSSCLRGMN LASFFSASKI IVFVTFTTYV LLGSVITASR VFVAVTLYGA   360
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      VRLTVTLFFP  SAIERVSEAI  VSIRRIQTPL  LLDEISQRNR  QLPSDGKKMV  HVQDFTAFWD    420
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 5    QPWVFSGTLR  SNILFGKKYE  KERYEKVIKA  CALKKDLQLL  EDGDLTVIGD  RGTTLSGGQK    540
      ARVNLARAVY  QDADIYLLDD  PLSAVDAEVS  RHLFELCICQ  ILHEKITILV  THQLQYLKAA    600
      SQILILKDGK  MVQKGTYTEF  LKSGIDFGSL  LKKDNEESEQ  PPVPGTPTLR  NRTFSESSVW    660
      SQQSSRPSLK  DGALESQDTE  NVPVTLSEEN  RSEGKVGFQA  YKNYFRAGAH  WIVPIFLILL    720
      NTAAQVAYVL  QDWWLSYWAN  KQSMLNVTVN  GGGNVTEKLD  LNWYLGIYSG  LTVATVLFGI    780
10    ARSLLVFYVL  VNSSQTLHNK  MFESILKAPV  LFFDRNPIGR  ILNRFSKDIG  HLDDLLPLTF    840
      LDFIQTLLQV  VGVVSVAVAV  IPWIAIPLVP  LGIIFIFLRR  YFLETSRDVK  RLESTTRSPV    900
      FSHLSSSLQG  LWTIRAYKAE  ERCQELFDAH  QDLHSEAWFL  FLTTSRWFAV  RLDAICAMFV    960
      IIVAFGSLIL  AKTLDAGQVG  LALSYALTLM  GMFQWCVRQS  AEVENMMISV  ERVIEYTDLE   1020
      KEAPWEYQKR  PPPAWPHEGV  IIFDNVNFMY  SPGGPLVLKH  LTALIKSQEK  VGIVGRTGAG   1080
15    KSSLISALFR  LSEPEGKIWI  DKILTTEIGL  HDLRKKMSII  PQEPVLFTGT  MRKNLDPFNE   1140
      HTDEELWNAL  QEVQLKETIE  DLPGKMDTEL  AESGSNFSVG  QRQLVCLARA  ILRKNQILII   1200
      DEATANVDPR  TDELIQKKIR  EKFAHCTVLT  IAHRLNTIID  SDKIMVLDSG  RLKEYDEPYV   1260
      LLQNKESLFY  KMVQQLGKAE  AAALTETAKQ  VYFKRNYPHI  GHTDHMVTNT  SNGQPSTLTI   1320
      FETAL
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      Seq ID NO:  571 DNA sequence
      Nucleic Acid Accession #:  AF07120
      Coding sequence:  116..4093
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      GCCCGTGTAC  CAGGAGGTGA  AGCCCAACCC  GCTGCAGGAC  GCGAACATCG  GCTCACGCGT   180
      GTTCTTCTGG  TGGCTCAATC  CCTTGTTTAA  AATTGGCCAT  AAACGGAGAT  TAGAGGAAGA   240
      TGATATGTAT  TCAGTGCTGC  CAGAAGACCG  CTCACAGCAC  CTTGGAGAGG  AGTTGCAAGG   300
      GTTCTGGGAT  AAAGAAGTTT  TAAGAGCTGA  GAATGACGCA  CAGAAGCCTT  CTTTAACAAG   360
      AGCAATCATA  AAGTGTTACT  GGAAATCTTA  TTTAGTTTTG  GGAATTTTTA  CGTTAATTGA   420
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      TTCGTTTTTC  AGTGCAAGCA  AAATCATCGT  GTTTGTGACC  TTCACCACCT  ACGTGCTCCT  1140
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      GGCCCCAAGT  CACGGGCTGG  TCAGCGTGCA  TGGAAGAATT  GCCTATGTGT  CTCAGCAGCC  1560
      CTGGGTGTTC  TCGGGAACTC  TGAGGAGTAA  TATTTTATTT  GGGAAGAAAT  ATGAAAAGGA  1620
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      CAGTGCAGTA  GATGCGGAAG  TTAGCAGACA  CTTGTTCGAA  CTGTGTATTT  GTCAAATTTT  1860
      GCATGAGAAG  ATCACAATTT  TAGTGACTCA  TCAGTTGCAG  TACCTCAAAG  CTGCAAGTCA  1920
      GATTCTGATA  TTGAAAGATG  GTAAAATGGT  GCAGAAGGGG  ACTTACACTG  AGTTCCTAAA  1980
      ATCTGGTATA  GATTTTGGCT  CCCTTTTAAA  GAAGGATAAT  GAGGAAAGTG  AACAACCTCC  2040
      AGTTCCAGGA  ACTCCCACAC  TAAGGAATCG  TACCTTCTCA  GAGTCTTCGG  TTTGGTCTCA  2100
      ACAATCTTCT  AGACCCTCCT  TGAAAGATGG  TGCTCTGGAG  AGCCAAGATA  CAGAGAATGT  2160
      CCCAGTTACA  CTATCAGAGG  AGAACCGTTC  TGAAGGAAAA  GTTGGTTTTC  AGGCCTATAA  2220
      GAATTACTTC  AGAGCTGGTG  CTCACTGGAT  TGTCTTCATT  TTCCTTATTC  TCCTAAACAC  2280
      TGCAGCTCAG  GTTGCCTATG  TGCTTCAAGA  TTGGTGGCTT  TCATACTGGG  CAAACAAACA  2340
      AAGTATGCTA  AATGTCACTG  TAAATGGAGG  AGGAAATGTA  ACCGAGAAGC  TAGATCTTAA  2400
      CTGGTACTTA  GGAATTTATT  CAGGTTTAAC  TGTAGCTACC  GTTCTTTTTG  GCATAGCAAG  2460
      ATCTCTATTG  GTATTCTACG  TCCTTGTTAA  CTCTTCACAA  ACTTTGCACA  ACAAAATGTT  2520
      TGAGTCAATT  CTGAAAGCTC  CGGTATTATT  CTTTGATAGA  AATCCAATAG  GAAGAATTTT  2580
      AAATCGTTTC  TCCAAAGACA  TTGGACACTT  GGATGATTTG  CTGCCGCTGA  CGTTTTTAGA  2640
      TTTCATCCAG  ACATTGCTAC  AAGTGGTTGG  TGTGGTCTCT  GTGGCTGTGG  CCGTGATTCC  2700
      TTGGATCGCA  ATACCCTTGG  TTCCCCTTGG  AATCATTTTC  ATTTTTCTTC  GGCGATATTT  2760
      TTTGGAAACG  TCAAGAGATG  TGAAGCGCCT  GGAATCTACA  ACTCGGAGTC  CAGTGTTTTC  2820
      CCACTTGTCA  TCTTCTCTCC  AGGGGCTCTG  GACCATCCGG  GCATACAAAG  CAGAAGAGAG  2880
      GTGTCAGGAA  CTGTTTGATG  CACACCAGGA  TTTACATTCA  GAGGCTTGGT  TCTTGTTTTT  2940
      GACAACGTCC  CGCTGGTTCG  CCGTCCGTCT  GGATGCCATC  TGTGCCATGT  TTGTCATCAT  3000
      CGTTGCCTTT  GGGTCCCTGA  TTCTGGCAAA  AACTCTGGAT  GCCGGGCAGG  TTGGTTTGGC  3060
      ACTGTCCTAT  GCCCTCACGC  TCATGGGGAT  GTTTCAGTGG  TGTGTTCGAC  AAAGTGCTGA  3120
      AGTTGAGAAT  ATGATGATCT  CAGTAGAAAG  GGTCATTGAA  TACACAGACC  TTGAAAAAGA  3180
      AGCACCTTGG  GAATATCAGA  AACGCCCACC  ACCAGCCTGG  CCCCATGAAG  GAGTGATAAT  3240
      CTTTGACAAT  GTGAACTTCA  TGTACAGTCC  AGGTGGGCCT  CTGGTACTGA  AGCATCTGAC  3300
      AGCACTCATT  AAATCACAAG  AAAAGGTTGG  CATTGTGGGA  AGAACCGGAG  CTGGAAAAAG  3360
      TTCCCTCATC  TCAGCCCTTT  TTAGATTGTC  AGAACCCGAA  GGTAAAATTT  GGATTGATAA  3420
      GATCTTGACA  ACTGAAATTG  GACTTCACGA  TTTAAGGAAG  AAAATGTCAA  TCATACCTCA  3480
      GGAACCTGTT  TTGTTCACTG  AACAATGAG   GAAAAACCTG  ATCCCTTTA   AGGAGCACAC  3540
      GGATGAGGAA  CTGTGGAATG  CCTTACAAGA  GGTACAACTT  AAAGAAACCA  TTGAAGATCT  3600
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         TCCTGGTAAA ATGGATACTG AATTAGCAGA ATCAGGATCC AATTTTAGTG TTGGACAAAG  3660
         ACAACTGGTG TGCCTTGCCA GGGCAATTCT CAGGAAAAAT CAGATATTGA TTATTGATGA  3720
         AGCGACGGCA AATGTGGATC CAAGAACTGA TGAGTTAATA CAAAAAAAAA TCCGGGAGAA  3780
         ATTTGCCCAC TGCACCGTGC TAACCATTGC ACACAGATTG AACACCATTA TTGACAGCGA  3840
    5    CAAGATAATG GTTTTAGATT CAGGAAGACT GAAAGAATAT GATGAGCCGT ATGTTTTGCT  3900
         GCAAAATAAA GAGAGCCTAT TTTACAAGAT GGTGCAACAA CTGGGCAAGG CAGAAGCCGC  3960
         TGCCCTCACT GAAACAGCAA AACAGGTATA CTTCAAAAGA AATTATCCAC ATATTGGTCA  4020
         CACTGACCAC ATGGTTACAA ACACTTCCAA TGGACAGCCC TCGACCTTAA CTATTTTCGA  4080
         GACAGCACTG TGAATCCAAC CAAAATGTCA AGTCCGTTCC GAAGGCATTT TCCACTAGTT  4140
    10   TTTGGACTAT GTAAACCACA TTGTACTTTT TTTTACTTTG GCAACAAATA TTTATACATA  4200
         CAAGATGCTA GTTCATTTGA ATATTTCTCC C
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Seq ID NO: 572 Protein sequence
Protein Accession #: AAC27076.1

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    1          11         21         31         41         51
    |          |          |          |          |          |
    MLPVYQEVKP NPLQDANICS RVFFWWLNPL FKIGHKRRLE EDDMYSVLPE DRSQHLGEEL   60
    QGFWDKEVLR AENDAQKPSL TRAIIKCYWK SYLVLGIFTL IEESAKVIQP IFLGKIINYF  120
    ENYDPMDSVA LNTAYAYATV LTFCTLILAI LHHLYFYHVQ CAGMRLRVAM CHMIYRKALR  180
    LSNMAMGKTT TGQIVNLLSN DVNKFDQVTV FLHFLWAGPL QAIAVTALLW MEIGISCLAG  240
    MAVLIILLPL QSCFGKLFSS LRSKTATFTD ARIRTMNEVI TGIRIIKMYA WEKSFSNLIT  300
    NLRKKEISKI LRSSCLRGMN LASFFSASKI IVFVTFTTYV LLGSVITASR VFVAVTLYGA  360
    VRLTVTLFFP SAIERVSEAI VSIRRIQTFL LLDEISQRNR QLPSDGKKMV HVQDFTAFWD  420
    KASETPTLQG LSFTVRPGEL LAVVGPVGAG KSSLLSAVLG ELAPSHGLVS VHGRIAYVSQ  480
    QPWVPSGTLR SNILFGKKYE KERYEKVIKA CALKKDLQLL EDGDLTVIGD RGTTLSGGQK  540
    ARVNLARAVY QDADIYLLDD PLSAVDAEVS RHLFELCICQ ILHEKITILV THQLQYLKAA  600
    SQILILKDGK MVQKGTYTEF LKSGIDFGSL LKKDNEESEQ PPVPGTPTLR NRTFSESSVW  660
    SQQSSRPSLK DGALESQDTE NVPVTLSEEN RSEGKVGFQA YKNYFRAGAH WIVFIFLILL  720
    NTAAQVAYVL QDWWLSYWAN KQSMLNVTVN GGGNVTEKLD LNWYLGIYSG LTVATVLFGI  780
    ARSLLVFYVL VNSSQTLHNK MFESILKAPV LFFDRNPIGR ILNRFSKDIG HLDDLLPLTF  840
    LDFIQTLLQV VGVVSVAVAV IPWIAIPLVP LGIIFIPLRR YFLETSRDVK RLESTTRSPV  900
    FSHLSSSLQG LWTIRAYKAE ERCQELFDAH QDLHSEAWFL FLTTSRWFAV RLDAICAMFV  960
    IIVAFGSLIL AKTLDAGQVG LALSYALTLM GMFQWCVRQS AEVENMMISV ERVIEYTDLE 1020
    KEAPWEYQKR PPPAWPHEGV IIFDNVNFMY SPGGPLVLKH LTALIKSQEK VGIVGRTGAG 1080
    KSSLISALFR LSEPEGKIWI DKILTTEIGL HDLRKKMSII PQEPVLFTGT MRKNLDPFKE 1140
    HTDEELWNAL QEVQLKETIE DLPGKMDTEL AESGSNFSVG QRQLVCLARA ILRKNQILII 1200
    DEATANVDPR TDELIQKKIR EKFAHCTVLT IAHRLNTIID SDKIMVLDSG RLKEYDEPYV 1260
    LLQNKESLFY KMVQQLGKAE AAALTETAKQ VYFKRNYPHI GHTDHMVTNT SNGQPSTLTI 1320
    FETAL
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Seq ID NO: 573 DNA sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1365

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    1          11         21         31         41         51
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    ATGGAATCAA TCTCTATGAT GGGAAGCCCT AAGAGCCTTA GTGAAACTTG TTTACCTAAT   60
    GGCATAAATG GTATCAAAGA TGCAAGGAAG GTCACTGTAG GTGTGATTGG AAGTGGAGAT  120
    TTTGCCAAAT CCTTGACCAT TCGACTTATT AGATGCGGCT ATCATGTGGT CATAGGAAGT  180
    AGAAATCCTA AGTTTGCTTC TGAATTTTTT CCTCATGTGG TAGATGTCAC TCATCATGAA  240
    GATGCTCTCA CAAAAACAAA TATAATATTT GTTGCTATAC ACAGAGAACA TTATACCTCC  300
    CTGTGGGACC TGAGACATCT GCTTGTGGGT AAAAATCCTGA TTGATGTGAG CAATAACATG  360
    AGGATAAACC AGTACCCAGA ATCCAATGCT GAATATTTGT CTTCATTATT CCCAGATTCT  420
    TTGATTGTCA AAGGATTTAA TGTTGTCTCA GCTTGGGCAC TTCAGTTAGG ACCTAAGGAT  480
    GCCAGCCGGC AGGTTTATAT ATGCAGCAAC AATATTCAAG CGCGACAACA GGTTATTGAA  540
    CTTGCCCGCC AGTTGAATTT CATTCCCATT GACTTGGGAT CCTTATCATC AGCCAGAGAG  600
    ATTGAAAATT TACCCCTACG ACTCTTTACT CTCTGGAGAG GGCCAGTGGT GGTAGCTATA  660
    AGCTTGGCCA CATTTTTTTT CCTTTATTCC TTTGTCAGAG ATGTGATTCA TCCATATGCT  720
    AGAAACCAAC AGAGTGACTT TTACAAAATT CCTATAGAGA TTGTGAATAA AACCTTACCT  780
    ATAGTTGCCA TTACTTTGCT CTCCCTAGTA TACCTCGCAG GTCTTCTGGC AGCTGCTTAT  840
    CAACTTTATT ACGGCACCAA GTATAGGAGA TTTCCACCTT GGTTGGAAAC CTGGTTACAG  900
    TGTAGAAAAC AGCTTGGATT ACTAAGTTTT TTCTTCGCTA TGGTCCATGT TGCCTACAGC  960
    CTCTGCTTAC CGATGAGAAG GTCAGAGAGA TATTTGTTTC TCAACATGGC TTATCAGCAG 1020
    GTTCATGCAA ATATTGAAAA CTCTTGGAAT GAGGAAGAAG TTTGGAGAAT TGAAATGTAT 1080
    ATCTCCTTTG GCATAATGAG CCTTGGCTTA CTTTCCCTCC TGGCATGTCAC TTCTATCCCT 1140
    TCAGTGAGCA ATGCTTTAAA CTGGAGAGAA TTCAGTTTTA TTCAGTCTAC ACTTGGATAT 1200
    GTCGCTCTGC TCATAAGTAC TTTCCATGTT TTAATTTATG GATGGAAACG AGCTTTTGAG 1260
    GAAGAGTACT ACAGATTTTA TACACCACCA AACTTTGTTC TTGCTCTTGT TTTGCCCTCA 1320
    ATTGTAATTC TGGATCTTTT GCAGCTTTGC AGATACCCAG ACTGA
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Seq ID NO: 574 Protein sequence
Protein Accession #: Eos sequence

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    1          11         21         31         41         51
    |          |          |          |          |          |
    MESISMMGSP KSLSETCLPN GINGIKDARK VTVGVIGSGD FAKSLTIRLI RCGYHVVIGS   60
    RNPKFASEFF PHVVDVTHHE DALTKTNIIF VAIHREHYTS LWDLRHLLVG KILIDVSNNM  120
    RINQYPESNA EYLASLPPDS LIVKGFNVVS AWALQLGPKD ASRQVYICSN NIQARQQVIE  180
    LARQLNFIPI DLGSLSSARE IENLPLRLFT LWRGPVVVAI SLATFFFLYS FVRDVIHPYA  240
    RNQQSDFYKI PIEIVNKTLP IVAITLLSLV YLAGLLAAAY QLYYGTKYRR FPPWLETWLQ  300
    CRKQLGLLSF PFAMVHVAYS LCLPMRRSER YLFLNMAYQQ VHANIENSWN EEEVWRIEMY  360
    ISFGIMSLGL LSLLAVTSIP SVSNALNWRE FSFIQSTLGY VALLISTFHV LIYGWKRAFE  420
    EEYYRFYTPP NFVLALVLPS IVILDLLQLC RYPD
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Seq ID NO: 575 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001873.1
Coding sequence: 3..1721

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1         11        21        31        41        51
|         |         |         |         |         |
AAATGGCGTG CCCGTCTCTC CGCCGGCCCC CTGCCTCGCA GTGGTTTCTC CTGCAGCTCC   60
CCTGGGCTCC GCGGCCAGTA GTGCAGCCCG TGGAGCCGCG GCTTTGCCCG TCTCCTCTGG  120
GTGGCCCCAG TGCGCGGGCT GACACTCATT CAGCCGGGGA AGGTGAGGCG AGTAGAGGCT  180
GGTGCGGAAC TTGCCGCCCC CAGCAGCGCC GGCGGGCTAA GCCCAGGGGC GGGCAGACAA  240
AAGAGGCCGC CCGCGTAGGA AGGCACGGCC GGCGGCGGCG GAGCGCAGCG ATGGCCGGGC  300
GAGGGGGCAG CGCGCTGCTG GCTCTGTGCG GGGCACTGGC TGCCTGCGGG TGGCTCCTGG  360
GCGCCGAAGC CCAGGAGCCC GGGGCGCCCG CGGCCGGGCAT GAGGCGGCGC CGGCGGCTGC  420
AGCAAGAGGA CGGCATCTCC TTCGAGTACC ACCGCTACCC CGAGCTGCGC GAGGCGCTCG  480
TGTCCGTGTG GCTGCAGTGC ACCGCCATCA GCAGGATTTA CACGGTGGGG CGCAGCTTCG  540
AGGGCCGGGA GCTCCTGGTC ATCGAGCTGT CCGACAACCC TGGCGTGCCAT GAGCCTGGTG  600
AGCCTGAATT TAAATACATT GGGAATATGC ATGGGAATGA GGCTGTTGGA CGAGAACTGC  660
TCATTTTCTT GGCCCAGTAC CTATGCAACG AATACCAGAA GGGGAACGAG ACAATTGTCA  720
ACCTGATCCA CAGTACCCGC ATTCACATCA TGCCTTCCCT GAACCCAGAT GGCTTTGAGA  780
AGGCAGCGTC TCAGCCTGGT GAACTCAAGG ACTGGTTTGT GGGTCGAAGC AATGCCCAGG  840
GAATAGATCT GAACCGGAAC TTTCCAGACC TGGATAGGAT AGTGTACGTG AATGAGAAAG  900
AAGGTGGGTCC AAATAATCAT CTGTTGAAAA ATATGAAGAA AATTGTGGAT CAAAACACAA  960
AGCTTGCTCC TGAGACCAAG GCTGTCATTC ATTGGATTAT GGATATTCCT TTTGTGCTTT 1020
CTGCCAATCT CCATGGAGGA GACCTTGTGG CCAATTATCC ATATGATGAG ACGCGGAGTG 1080
GTAGTGCTCA CGAATACAGC TCCTCCCCAG ATGAGGCCAT TTTCCAAAGC TTGGCCCGGG 1140
CATACTCTTC TTTCAACCCG GCCATGTCTG ACCCCAATCG GCCACCATGT CGCAAGAATG 1200
ATGATGACAG CAGCTTTGTA GATGGAACCA CCAACGGTGG TGCTTGGTAC AGCGTACCTG 1260
GAGGGATGCA AGACTTCAAT TACCTTAGCA GCAACTGTTT TGAGATCACC GTGGAGCTTA 1320
GCTGTGAGAA GTTCCCACCT GAAGAGACTC TGAAGACCTA CTGGGAGGAT AACAAAAACT 1380
CCCTCATTAG CTACCTTGAG CAGATACACC GAGGAGTTAA AGGATTTGTC CGAGACCTTC 1440
AAGGTAACCC AATTGCGAAT GCCACCATCT CCGTGGAAGG AATAGACCAC GATGTTACAT 1500
CCGCAAAGGA TGGTGATTAC TGGAGATTGC TTATACCTGG AAACTATAAA CTTACAGCCT 1560
CAGCTCCAGG CTATCTGGCA ATAACAAAGA AAGTGGCAGT TCCTTACAGC CCTGCTGCTG 1620
GGGTTGATTT TGAACTGGAG TCATTTTCTG AAAGGAAAGA AGAGGAGAAG GAAGAATTGA 1680
TGGAATGGTG GAAAATGATG TCAGAAACTT TAAATTTTTA AAAAGGCTTC TAGTTAGCTG 1740
CTTTAAATCT ATCTATATAA TGTAGTATGA TGTAATGTGG TCTTTTTTTT AGATTTTGTG 1800
CAGTTAATAC TTAACATTGA TTTATTTTTT AATCATTTAA ATATTAATCA ACTTTCCTTA 1860
AAATAAATAG CCTCTTAGGT AAAAAATATAA GAACTTGATA TATTTCATTC TCTTATATAG 1920
TATTCATTTT CCTACCTATA TTACACAAAA AAGTATAGAA AAGATTTAAG TAATTTTGCC 1980
ATCCTAGGCT TAAATGCAAT ATTCCTGGTA TTATTTACAA TGCACGAATTT TTTGAGTAAT 2040
TCTAGCTTTC AAAAATTAGT GAAGTTCTTT TACTGTAATT GGTGACAATG TCACATAATG 2100
AATGCTATTG AAAAGGTTAA CAGATACAGC TCGGAGTTGT GAGCACTCTA CTGCAAGACT 2160
TAAATAGTTC AGTATAAATT GTCGTTTTTT TCTTGTGCTG ACTAACTATA AGCATGATCT 2220
TGTTAATGCA TTTTTGATGG GAAGAAAAGG TACATGTTTA CAAAGAGGTT TTATGAAAAG 2280
AATAAAAATT GACTTCTTGC TTGTACATAT AGGAGCAATA CTATTATATT ATGTAGTCCG 2340
TTAACACTAC TTAAAAGTTT AGGGTTTTCT CTTGGTTGTA GAGTGGCCCA GAATTGCATT 2400
CTGAATGAAT AAAGGTTAAA AAAAAATCCC CAGTGAAAAA AAA
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Seq ID NO: 576 <u>Protein sequence</u>
Protein Accession #: NP_001864.1

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1          11         21         31         41         51
|          |          |          |          |          |
MAGRGGSALL ALCGALAACG WLLGAEAQEP GAPAAGMRRR RRLQQEDGIS FEYHRYPELR   60
EALVSVWLQC TAISRIYTVG RSFEGRELLV IELSDNPGVH EPGEPEFKYI GNMHGNEAVG  120
RELLIFLAQY LCNEYQKGNE TIVNLIHSTR IHIMPSLNPD GFEKAASQPG ELKDWFVGRS  180
NAQGIDLNRN FPDLDRIVYV NEKEGGPNNH LLKNMKKIVD QNTKLAPETK AVIHWIMDIP  240
FVLSANLHGG DLVANYPYDE TRSGSAHEYS SSPDDAIFQS LARAYSSFNP AMSDPNRPPC  300
RKNDDDSSFV DGTTNGGAWY SVPGGMQDFN YLSSNCFEIT VELSCEKFPP EETLKTYWED  360
NKNSLISYLE QIHRGVKGFV RDLQGNPIAN ATISVEGIDH DVTSAKDGDY WRLLIPGNYK  420
LTASAPGYLA ITKKVAVPYS PAAGVDFELE SFSERKEEEK EELMEWWKMM SETLNF
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Seq ID NO: 577 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..933

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1         11        21        31        41        51
|         |         |         |         |         |
ATGTGCAGCA ATGGACGGTG CATCCCGGGC GCCTGGCAGT GTGACGGGCT GCCTGACTGC   60
TTCGACAAGA GTGATGAGAA GGAGTGCCCC AAGGCTAAGT CGAAATGTGG CCCGACCTTC  120
TTCCCCTGTG CCAGCGGCAT CCATTGCATC ATTGGTCGCT TCCGGTGCAA TGGGTTTGAG  180
GACTGTCCCG ATGGCAGCGA TGAAGAGAAC TGCACAGCAA ACCCTCTGCT TTGCTCCACC  240
GCCCGCTACC ACTGCAAGAA CGGCCTCTGT ATTGACAAGA GCTTCATCTG CGATGGACAG  300
AATAACTGTC AAGACAACAG TGATGAGGAA AGCTGTGAAA GTTCTCAAGA ACCCGGCAGT  360
GGGCAGGTGT TTGTGACTTC AGAGAACCAA CTTGTGTATT ACCCCAGCAT CACCTATGCC  420
ATCATCGGCA GCTCCGTCAT TTTTGTGCTG GTGGTGGCCC TGCTGGCACT GGTCTTGCAC  480
CACCAGCGGA AGCGGAACAA CCTCATGACG CTGCCCGTGC ACCGGCTGCA GCACCCTGTG  540
CTGCTGTCCC GCCTGGTGGT CCTGGACCAC CCCACCACT GCAACGTCAC CTACAACGTC  600
AATAATGGCA TCCAGTATGT GGCCAGCCAG GCGGAGCAGA ATGCGTCGGA AGTAGGCTCC  660
CCACCCTCCT ACTCCGAGGC CTTGCTGGAC CAGAGGCCTG CGTGGTATGA CCTTCCTCCA  720
CCGCCCTACT CTTCTGACAC GGAATCTCTG AACCCAGCCG ACCTGCCCCC CTACGGCTCC  780
CGGTCCGGGA GTGCCAACAG TGCCAGCTCC CAGGCAGCCA GCAGCCTCCT GAGCGTGGAA  840
GACACCAGCC ACAGCCCGGG GCAGCCTGGC CCCCAGGAGG CGACTGCTGA GCCCAGGGAC  900
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TCTGAGCCCA GCCAGGGCAC TGAAGAAGTA TAA

Seq ID NO:  578 Protein sequence
Protein Accession #: Eos sequence

1          11         21         31         41         51
|          |          |          |          |          |
MCSNGRCIPG AWQCDGLPDC FDKSDEKECP KAKSKCGPTF FPCASGIHCI IGRFRCNGFE   60
DCPDGSDEEN CTANPLLCST ARYHCKNGLC IDKSFICDGQ NNCQDNSDEE SCESSQEPGS  120
GQVFVTSENQ LVYYPSITYA IIGSSVIFVL VVALLALVLH HQRKRNNLMT LPVHRLQHPV  180
LLSRLVVLDH PHHCNVTYNV NNGIQYVASQ AEQNASEVGS PPSYSEALLD QRPAWYDLPP  240
PPYSSDTESL NQADLPPYRS RSGSANSASS QAASSLLSVE DTSHSPGQPG PQEGTAEPRD  300
SEPSQGTEEV

Seq ID NO:  579 DNA sequence
Nucleic Acid Accession #: AF179274.1
Coding sequence: 1..1125

1          11         21         31         41         51
|          |          |          |          |          |
ATGGTGCTGT GGGAGTCCCC GCGGCAGTGC AGCAGCTGGA CACTTTGCGA GGGCTTTTGC   60
TGGCTGCTGC TGCTGCCCGT CATGCTACTC ATCGTAGCCC GCCCGGTGAA GCTCGCTGCT  120
TTCCCTACCT CCTTAAGTGA CTGCCAAACG CCCACCGGCT GGAATTGCTC TGGTTATGAT  180
GACAGAGAAA ATGATCTCTT CCTCTGTGAC ACCAACACCT GTAAATTTGA TGGGGAATGT  240
TTAAGAATTG GAGACACTGT GACTTGCGTC TGTCAGTTCA AGTGCAACAA TGACTATGTG  300
CCTGTGTGTG GCTCCAATGG GGAGAGCTAC CAGAATGAGT GTTACCTGCG ACAGGCTGCA  360
TGCAAACAGC AGAGTGAGAT ACTTGTGGTG TCAGAAGGAT CATGTGCCAC AGATGCAGGA  420
TCAGGATCTG GAGATGGGGT CCATGAAGGC TCTGGAGAAA CTAGTCAAAA GGAGACATCC  480
ACCTGTGATA TTTGCCAGTT TGGTGCAGAA TGTGACGAAG ATGCCGAGGA TGTCTGGTGT  540
GTGTGTAATA TTGACTGTTC TCAAACCAAC TTCAATCCCC TCTGCGCTTC TGATGGGAAA  600
TCTTATGATA ATGCATGCCA AATCAAAGAA GCATCGTGTC AGAAACAGGA GAAAATTGAA  660
GTCATGTCTT TGGGTCGATG TCAAGATAAC ACAACTACAA CTACTAAGTC TGAAGATGGG  720
CATTATGCAA GAACAGATTA TGCAGAGAAT GCTAACAAAT TAGAAGAAAG TGCCAGAGAA  780
CACCACATAC CTTGTCCGGA ACATTACAAT GGCTTCTGCA TGCATGGGAA GTGTGAGCAT  840
TCTATCAATA TGCAGGAGCC ATCTTGCAGG TGTGATGCTG GTTATACTGG ACAACACTGT  900
GAAAAAAAGG ACTACAGTGT TCTATACGTT GTTCCCGGTC CTGGTACGATT TCAGTATGTC  960
TTAATCGCAG CTGTGATTGG AACAATTCAG ATTGCTGTCA TCTGTGTGGT GGTCCTCTGC 1020
ATCACAAGGA AATGCCCCAG AAGCAACAGA ATTCACAGAC AGAAGCAAAA TACAGGGCAC 1080
TACAGTTCAG ACAATACAAC AAGAGCGTCC ACGAGGTTAA TCTGA

Seq ID NO:  580 Protein sequence
Protein Accession #: NP_057276.2

1          11         21         31         41         51
|          |          |          |          |          |
MVLWESPRQC SSWTLCEGFC WLLLLPVMLL IVARPVKLAA PPTSLSDCQT PTGWNCSGYD   60
DRENDLFLCD TNTCKFDGEC LRIGDTVTCV CQFKCNNDYV PVCGSNGESY QNECYLRQAA  120
CKQQSEILVV SEGSCATDAG SGSGDGVHEG SGETSQKETS TCDICQFGAE CDEDAEDVWC  180
VCNIDCSQTN FNPLCASDGK SYDNACQIKE ASCQKQEKIE VMSLGRCQDN TTTTTKSEDG  240
HYARTDYAEN ANKLEESARE HHIPCPEHYN GFCMHGKCEH SINMQEPSCR CDAGYTGQHC  300
EKKDYSVLYV VPGPVRFQYV LIAAVIGTIQ IAVICVVVLC ITRKCPRSNR IHRQKQNTGH  360
YSSDNTTRAS TRLI

Seq ID NO:  581 DNA sequence
Nucleic Acid Accession #: S78203.1
Coding sequence: 1..2190

1          11         21         31         41         51
|          |          |          |          |          |
ATGAATCCTT TCCAGAAAAA TGAGTCCAAG GAAACTCTTT TTTCACCTGT CTCCATTGAA   60
GAGGTACCAC CTCGACCACC TAGCCCTCCA AAGAAGCCAT CTCCGACAAT CTGTGGCTCC  120
AACTATCCAC TGAGCATTGC CTTCATTGTG GTGAATGAAT TCTGCGAGCG CTTTTCCTAT  180
TATGGAATGA AAGCTGTGCT GATCCTGTAT TTCCTGTATT TCCTGCACTG GAATGAAGAT  240
ACCTCCACAT CTATATACCA TGCCTTCAGC AGCCTCTGTT ATTTTACTCC CATCCTGGGA  300
GCAGCCATTG CTGACTCGTG GTTGGGAAAA TTCAAGACAA TCATCTATCT CTCCTTGGTG  360
TATGTGCTTG GCCATGTGAT CAAGTCCTTG GGTGCCTTAC CAATACTGGG AGGACAAGTG  420
GTACACACAG TCCTATCATT GATCGGCCTG AGTCTAATAG CTTTGGGGAC AGGAGGCATC  480
AAACCCTGTG TGGCAGCTTT TGGTGGAGAC CAGTTTGAAG AAAAACATGC AGAGGAACGG  540
ACTAGATACT TCTCAGTCTT CTACCTGTCC ATCAATGCAG GGAGCTTGAT TTCTACATTT  600
ATCACACCCA TGCTGAGAGG AGATGTGCAA TGTTTTGGAG AAGACTGCTA TGCATTGGCT  660
TTTGGAGTTC CAGGACTGCT CATGGTAATT GCACTTGTTG TGTTTGCAAT GGGAAGCAAA  720
ATATACAATA AACCACCCCC TGAAGGAAAC ATAGTGGCTC AAGTTTTCAA ATGTATCTGG  780
TTTGCTATTT CCAATCGTTT CAAGAACCGT TCTGGAGACA TTTCCAAAGCG ACAGCACTGG  840
CTAGACTGGG CAGCTGAGAA ATATCCAAAG CAGCTCATTA TGGATGTAAA GGCACTGACC  900
AGGGTACTAT TCCTTTATAT CCCATTGCCC ATGTTCTGGG CTCTTTTGGA TCAGCAGGGT  960
TCACGATGGA CTTTGCAAGC CATCAGGATG AATAGGAATT TGGGGTTTTT TGTGCTTCAG 1020
CCGGACCAGA TGCAGGTTCT AAAATCCCTTT CTGGTTCTTA TCTTCATCCC GTTGTTTGAC 1080
TTTGTCATTT ATCGTCTGGT CTCCAAGTGT GGAATTAACT TCTCATCACT TAGGAAAATG 1140
GCTGTTGGTA TGATCCTAGC GTGCCTGGCA TTTGCAGTTG CGGCAGCTGT AGAGATAAAA 1200
ATAAATGAAA TGGCCCCAGC CCAGTCAGGT CCCCAGGAGG TTTTCCTACA AGTCTTGAAT 1260
CTGGCAGATG ATGAGGTGAA GGTGACAGTG GTGGGAAATG AAAACAATTC TCTGTTGATA 1320
GAGTCCATCA AATCCTTTCA GAAAACACCA CACTATTCCA AACTGCACCT GAAAACAAAA 1380
AGCCAGGATT TTCACTTCCA CCTGAAATAT CACAATTTGT CTCTCTACAC TGAGCATTCT 1440
GTGCAGGAGA AGAACTGGTA CAGTCTTGTC ATTCGTGAAG ATGGAACAG TATCTCCAGC 1500
```

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ATGATGGTAA AGGATACAGA AAGCAAAACA ACCAATGGGA TGACAACCGT GAGGTTTGTT    1560
AACACTTTGC ATAAAGATGT CAACATCTCC CTGAGTACAG ATACCTCTCT CAATGTTGGT    1620
GAAGACTATG GTGTGTCTGC TTATAGAACT GTGCAAAGAG GAGAATACCC TGCAGTGCAC    1680
TGTAGAACAG AAGATAAGAA CTTTTCTCTG AATTTGGGTC TTCTAGACTT TGGTGCAGCA    1740
TATCTGTTTG TTATTACTAA TAACACCAAT CAGGGTCTTC AGGCCTGGAA GATTGAAGAC    1800
ATTCCAGCCA ACAAAATGTC CATTGCGTGG CAGCTACCAC AATATGCCCT GGTTACAGCT    1860
GGGGAGGTCA TGTTCTCTGT CACAGGTCTT GAGTTTTCTT ATTCTCAGGC TCCCTCTAGC    1920
ATGAAATCTG TGCTCCAGGC AGCTTGGCTA TTGACAATTG CAGTTGGGAA TATCATCGTG    1980
CTTGTTGTGG CACAGTTCAG TGGCCTGGTA CAGTGGGCCG AATTCATTTT GTTTTCCTGC    2040
CTCCTGCTGG TGATCTGCCT GATCTTCTCC ATCATGGGCT ACTACTATGT TCCTGTAAAG    2100
ACAGAGGATA TGCGGGGTCC AGCAGATAAG CACATTCCTC ACATCCAGGG GAACATGATC    2160
AAACTAGAGA CCAAGAAGAC AAAACTCTGA
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Seq ID NO: 582 Protein sequence
Protein Accession #: AAB34388.1

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 1          11         21         31         41         51
 |          |          |          |          |          |
MNPFQKNESK ETLFSPVSIE EVPPRPPSPP KKPSPTICGS NYPLSIAFIV VNEFCERFSY     60
YGMKAVLILY PLYFLHWNED TSTSIYHAFS SLCYFTPILG AAIADSWLGK FKTIIYLSLV    120
YVLGHVIKSL GALPILGGQV VHTVLSLIGL SLIALGTGGI KPCVAAFGGD QFEEKHAEER    180
TRYFSVFYLS INAGSLISTF ITPMLRGDVQ CFGEDCYALA FGVPGLLMVI ALVVFAMGSK    240
IYNKPPPEGN IVAQVFKCIW FAISNRFKNR SGDIPKRQHW LDWAAEKYPK QLIMDVKALT    300
RVLFLYIPLP MFWALLDQQG SRWTLQAIRM NRNLGFFVLQ PDQMQVLNPP LVLIFIPLFD    360
FVIYRLVSKC GINFSSLRKM AVGMILACLA FAVAAAVEIK INEMAPAQSG PQEVFLQVLN    420
LADDEVKVTV VGNENNSLLI ESIKSFQKTP HYSKLHLKTR SQDFHFHLKY HNLSLYTEHS    480
VQEKNWYSLV IREDGNSISS MMVKDTESKT TNGMTTVRFV NTLHKDVNIS LSTDTSLNVG    540
EDYGVSAYRT VQRGEYPAVH CRTEDKNFSL NLGLLDFGAA YLFVITNNTN QGLQAWKIED    600
IPANKMSIAW QLPQYALVTA GEVMFSVTGL EFSYSQAPSS MKSVLQAAWL LTIAVGNIIV    660
LVVAQFSGLV QWAEFILFSC LLLVICLIFS IMGYYYVPVK TEDMRGPADK HIPHIQGNMI    720
KLETKKTKL
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Seq ID NO: 583 DNA sequence
Nucleic Acid Accession #: NM_032642.1
Coding sequence: 184..1263

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 1          11         21         31         41         51
 |          |          |          |          |          |
GACCATTAGC AGGCACCCAG GCCTGTCTTT GGCTCGGAAA CGGTGGCCCC CAATGTAGCC     60
TAGTTTGAAC CTAGGAACTG CAGGACCAGA GAGATTCCAC TGGAGCCTGA TGGACGGGTG    120
ACAGAGGGAA CCCTACTCTG GAAACTGTCA GTCCCAGGGC ACTGGGGAGG GCTGAGGCCG    180
ACCATGCCCA GCCTGCTGCT GCTGTTCACG GCTGCTCTGC TGTCCAGCTG GGCTCAGCTT    240
CTGACAGACG CCAACTCCTG GTGGTCATTA GCTTTGAACC CGGTGCAGAG ACCCGAGATG    300
TTTATCATCG GTGCCCAGCC CGTGTGCAGT CAGCTTCCCG GGCTCTCCCC TGGCCAGAGG    360
AAGCTGTGCC AATTGTACCA GGAGCACATG GCCTACATAG GGGAGGGAGC CAAGACTGGC    420
ATCAAGGAAT GCCAGCACCA GTTCCGGCAG CGGCGGTGGA ATTGCAGCAC AGCGGACAAC    480
GCATCTGTCT TTGGGAGAGT CATGCAGATA GGCAGCCGAG AGACCGCCTT CACCCACGCG    540
GTGAGCGCCG CGGGCGTGGT CAACGCCATC AGCCGGGCCT GCCGCGAGGG CGAGCTCTCC    600
ACCTGCGGCT GCAGCCGGAC GGCGCGGCCC AAGGACCTGC CCCGGGACTG GCTGTGGGGC    660
GGCTGTGGGG ACAACGTGGA GTACGGCTAC CGCTTCGCCA AGGAGTTTGT GGATGCCCGG    720
GAGCGAGAGA AGAACTTTGC CAAAGGATCA GAGGAGCAGG GCCGGGTGCT CATGAACCTG    780
CAAAACAACG AGGCCGGTCG CAGGGCTGTG TATAAGATGG CAGACGTAGC CTGCAAATGC    840
CACGCCGTCT CGGGGTCCTG CAGCCTCAAG ACCTGCTGGC TGCAGCTGGC CGAGTTCCGC    900
AAGGTCGGGG ACCGGCTGAA GGAGAAGTAC GACAGCGCGG CCGCCATGCG CGTCACCCGC    960
AAGGGCCGGC TGGAGCTGGT CAACAGCCGC TTCACCCAGC CCACCCCGGA GGACCTGGTC   1020
TATGTGGACC CCAGCCCCGA CTACTGCCTG CGCAACGAGA GCCTGGGCAC CCTGGGCACG   1080
CAGGGCCGCC TCTGCAACAA GACCTCGGAG GGCATGGATG GCTGTGAGCT CATGTGCTGC   1140
GGGCGTGGCT ACAACCAGTT CAAGAGCGTG CAGGTGGAGC GCTGCCACTG CAAGTTCCAC   1200
TGGTGCTGCT TGTCAGGTGG TAAGAAGTGC ACGGAGATCG TGGACCAGTA CATCTGTAAA   1260
TAGCCCGGAG GGCCTGCTCC CGGCCCCCCC TGCACTCTGC CTCACAAAGG TCTATATTAT   1320
ATAAATCTAT ATAAATCTAT TTTATATTTG TATAAGTAAA TGGGTGGGTG CTATACAATG   1380
GAAAGATGAA AATGGAAAGG AAGAGCTTAT TTAAGAGACG CTGGAGATCT CTGAGGAGTG   1440
GACTTTGCTG GTTCTCTCCT CTTGGTGGGT GGGAGACAGG GCTTTTTCTC TCCCTCTGGC   1500
GAGGACTCTC AGGATGTAGG GACTTGGAAA TATTTACTGT CTGTCCACCA CGGCCTGGAG   1560
GAGGGAGGTT GTGGTGGGAT GGAGGAGATG ATCTTGTCTG GAAGTCTAGA GTCTTTGTTG   1620
GTTAGAGGAC TGCCTGTGAT CCTGGCCACT AGGCCAAGAG GCCCTATGAA GGTGGCGGGA   1680
ACTCAGCTTC AACCTCGATG TCTTCAGGGT CTTGTCCAGA ATGTAGATGG GTTCCGTAAG   1740
AGGCCTGGTG CTCTCTTACT CTTTCATCCA CGTGCACTTG TGCGGCATCT GCAGTTTACA   1800
GGAACGGCTC CTTCCCTAAA ATGAGAAGTC CAAGGTCATC TCTGGCCCAG TGACCACAGA   1860
GAGATCTGCA CCTCCCGGAC TTCAGGCCTG CCTTTCCAGC GAGAATTCTT CATCCTCCAC   1920
GGTTCACTAG CTCCTACCTG AAGAGGAAAG GGGGCCATTT GACCTGACAT GTCAGGAAAG   1980
CCCTAAACTG AATGTTTGCG CCTGGGCTGC AGAAGCCAGG GTGCATGACC AGGCTGCGTG   2040
GACGTTATAC TGTCTTCCCC CACCCCCGGG GAGGGGAAGC TTGAGCTGCT GCTGTCACTC   2100
CTCCACCGAG GGAGGCCTCA CAAACCACAG GACGCTGCAA CGGGTCAGGC TGGCGGGCCC   2160
GGCGTGCTCA TCATCTCTGC CCCAGGTGTA CGGTTTCTCT CTGACATTAA ATGCCCTTCA   2220
TGGAAAAAAA AAAAAGAAAA AAAAAAAAAA AA
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Seq ID NO: 584 Protein sequence
Protein Accession #: NP_116031.1

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 1          11         21         31         41         51
 |          |          |          |          |          |
MPSLLLLFTA ALLSSWAQLL TDANSWWSLA LNPVQRPEMF IIGAQPVCSQ LPGLSPGQRK     60
LCQLYQEHMA YIGEGAKTGI KECQHQFRQR RWNCSTADNA SVFGRVMQIG SRETAFTHAV    120
```

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SAAGVVNAIS RACREGELST CGCSRTARPK DLPRDWLWGG CGDNVEYGYR FAKEFVDARE   180
REKNPAKGSE EQGRVLMNLQ NNEAGRRAVY KMADVACKCH GVSGSCSLKT CWLQLAEFRK   240
VGDRLKEKYD SAAAMRVTRK GRLELVNSRF TQPTPEDLVY VDPSPDYCLR NESTGSLGTQ   300
GRLCNKTSEG MDGCELMCCG RGYNQFKSVQ VERCHCKFHW CCFVRCKKCT EIVDQYICK
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Seq ID NO: 585 <u>DNA sequence</u>
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1479

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1          11         21         31         41         51
|          |          |          |          |          |
ATGGCTTTGA ACTCAGGGTC ACCACCAGCT ATTGGACCTT ACTATGAAAA CCATGGGATAC   60
CAACCGGAAA ACCCCTATCC CGCACAGCCC ACTGTGGTCC CCACTGTCTA CGAGGTGCAT   120
CCGGCTCAGT ACTACCCGTC CCCCGTGCCC CAGTACGCCC CGAGGGTCCT GACGCAGGCT   180
TCCAACCCCG TCGTCTGCAC GCAGCCCAAA TCCCCATCCG GGACAGTGTG CACCTCAAAG   240
ACTAAGAAAG CACTGTGCAT CACCTTGACC CTGGGGACCT TCCTCGTGGG AGCTGCGCTG   300
GCCGCTGGCC TACTCTGGAA GTTCATGGGC AGCAAGTGCT CCAACTCTGG GATAGAGTGC   360
GACTCCTCAG GTACCTGCAT CAACCCCTCT AACTGGTGTG ATGGCGTGTC ACACTGCCCC   420
GGCGGGGAGG ACGAGAATCG GTGTGTTCGC CTCTACGGAC CAAACTTCAT CCTTCAGGTG   480
TACTCATCTC AGAGGAAGTC CTGGCACCCT GTGTGCCAAG ACGACTGGAA CGAGAACTAC   540
GGGCGGGCGG CCTGCAGGGA CATGGGCTAT AAGAATAATT TTTACTCTAG CCAAGGAATA   600
GTGGATGACA GCGGATCCAC CAGCTTTATG AAACTGAACA CAAGTGCCGG CAATGTCGAT   660
ATCTATAAAA AACTGTACCA CAGTGATGCC TGTTCTTCAA AAGCAGTGGT TTCTTTACGC   720
TGTATAGCCT GCGGGGTCAA CTTGAACTCA AGCCGCCAGA GCAGGATCGT GGGCGGCGAG   780
AGCGCGCTCC CGGGGGCCTG GCCCTGGCAG GTCAGCCTGC ACGTCCAGAA CGTCCACGTG   840
TGCGGAGGCT CCATCATCAC CCCCGAGTGG ATCGTGACAG CCGCCCACTG CGTGGAAAAA   900
CCTCTTAACA ATCCATGGCA TTGGACGGCA TTTGCGGGGA TTTTGAGACA ATCTTTCATG   960
TTCTATGGAG CCGGATACCA AGTAGAAAAA GTGATTTCTC ATCCAAATTA TGACTCCAAG   1020
ACCAAGAACA ATGACATTGC GCTGATGAAG CTGCAGAAGC CTCTGACTTT CAACGACCTA   1080
GTGAAACCAG TGTGTCTGCC CAACCCAGGC ATGATGCTGC AGCCAGAACA GCTCTGCTGG   1140
ATTTCCGGGT GGGGGGCCAC CGAGGAGAAA GGGAAGACCT CAGAAGTGCT GAACGCTGCC   1200
AAGGTGCTTC TCATTGAGAC ACAGAGATGC AACAGCAGAT ATGTCTATGA CAACCTGATC   1260
ACACCAGCCA TGATCTGTGC CGGCTTCCTG CAGGGGAACG TCGATTCTTG CCAGGGTGAC   1320
AGTGGAGGGC CTCTGGTCAC TTCGAAGAAC AATATCTGGT GGCTGATAGG GGATACAAGC   1380
TGGGGTTCTG GCTGTGCCAA AGCTTACAGA CCAGGAGTGT ACGGGAATGT GATGGTATTC   1440
ACGGACTGGA TTTATCGACA AATGAGGGCA GACGGCTAA
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Seq ID NO: 586 <u>Protein sequence</u>
Protein Accession #: Eos sequence

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1          11         21         31         41         51
|          |          |          |          |          |
MALNSGSPPA IGPYYENHGY QPENPYPAQP TVVPTVYEVH PAQYYPSPVP QYAPRVLTQA   60
SNPVVCTQPK SPSGTVCTSK TKKALCITLT LGTFLVGAAL AAGLLWKFMG SKCSNSGIEC   120
DSSGTCINPS NWCDGVSHCP GGEDENRCVR LYGPNFILQV YSSQRKSWHP VCQDDWNENY   180
GRAACRDMGY KNNFYSSQGI VDDSGSTSFM KLNTSAGNVD IYKKLYHSDA CSSKAVVSLR   240
CIACGVNLNS SRQSRIVGGE SALPGAWPWQ VSLHVQNVHV CGGSIITPEW IVTAAHCVEK   300
PLNNPWHWTA FAGILRQSFM FYGAGYQVEK VISHPNYDSK TKNNDIALMK LQKPLTFNDL   360
VKPVCLPNPG MMLQPEQLCW ISGWGATEEK GKTSEVLNAA KVLLIETQRC NSRYVYDNLI   420
TPAMICAGFL QGNVDSCQGD SGGPLVTSKN NIWWLIGDTS WGSGCAKAYR PGVYGNVMVF   480
TDWIYRQMRA DG
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Seq ID NO: 587 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_005656.1
Coding sequence: 57..1535

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1          11         21         31         41         51
|          |          |          |          |          |
GTCATATTGA ACATTCCAGA TACCTATCAT TACTCGATGC TGTTGATAAC AGCAAGATGG   60
CTTTGAACTC AGGGTCACCA CCAGCTATTG GACCTTACTA TGAAAACCAT GGATACCAAC   120
CGGAAAACCC CTATCCCGCA CAGCCCACTG TGGTCCCCAC TGTCTACGAG GTGCATCCGG   180
CTCAGTACTA CCCGTCCCCC GTGCCCCAGT ACGCCCCGAG AGGCCTGACG CAGGCTTCCA   240
ACCCCGTCGT CTGCACGCAG CCCAAATCCC CATCCGGGAC AGTGTGCACC TCAAAGACTA   300
AGAAAGCACT GTGCATCACC TTGACCCTGG GACCTTCCT CGTGGGAGCT GCGCTGGCCG   360
CTGGCCTACT CTGGAAGTTC ATGGGCAGCA AGTGCTCCAA CTCTGGGATA GAGTGCGACT   420
CCTCAGGTAC CTGCATCAAC CCCTCTAACT GGTGTGATGG CGTGTCACAC TGCCCCGGCG   480
GGGAGGACGA GAATCGGTGT GTTCGCCTCT ACGGACCAAA CTTCATCCTT CAGATGTACT   540
CATCTCAGAG GAAGTCCTGG CACCCTGTGT GCCAAGACGA CTGGAACGAG AACTACGGGC   600
GGGCGGCCTG CAGGGACATG GGCTATAAGA ATAATTTTTA CTCTAGCCAA GGAATAGTGG   660
ATGACAGCGG ATCCACCAGC TTTATGAAAC TGAACACAAG TGCCGGCAAT GTCGATATCT   720
ATAAAAAACT GTACCACAGT GATGCCTGTT CTTCAAAAGC AGTGGTTTCT TTACGCTGTT   780
TAGCCTGCGG GGTCAACTTG AACTCAAGCC GCCAGAGCAG GATCGTGGGC GGTGAGAGCG   840
CGCTCCCGGG GGCTGGCCC TGGCAGGTCA GCCTGCACGT CCAGAACGTC CACGTGTGCG   900
GAGGCTCCAT CATCACCCCC GAGTGGATCG TGACAGCCGC CCACTGCGTG GAAAACCTC   960
TTAACAATCC ATGGCATTGG ACGGCATTTG CGGGGATTTT GAGACAATCT TTCATGTTCT   1020
ATGGAGCCGG ATACCAAGTA CAAAAAGTGA TTTCTCATCC AAATTATGAC TCCAAGACCA   1080
AGAACAATGA CATTGCGCTG ATGAAGCTGC AGAAGCCTCT GACTTTCAAC GACCTAGTGA   1140
AACCAGTGTG TCTGCCCAAC CCAGGCATGA TGCTGCAGCC AGAACAGCTC TGCTGGATTT   1200
CCGGGTGGGG GGCCACCGAG GAGAAAGGGA AGACCTCAGA AGTGCTGAAC GCTGCCAAGG   1260
TGCTTCTCAT TGAGACACAG AGATGCAACA GCAGATATGT CTATGACAAC CTGATCACAC   1320
CAGCCATGAT CTGTGCCGGC TTCCTGCAGG GAACGTCGA TTCTTGCCAG GGTGACAGTG   1380
GAGGGCCTCT GGTCACTTCG AACAACAATA TCTGGTGGCT GATAGGGGAT ACAAGCTGGG   1440
GTTCTGGCTG TGCCAAAGCT TACAGACCAG GAGTGTACGG GAATGTGATG GTATTCACGG   1500
ACTGGATTTA TCGACAAATG AAGGCAAACG GCTAATCCAC ATGGTCTTCG TCCTTGACGT   1560
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CGTTTTACAA GAAAACAATG GGGCTGGTTT TGCTTCCCCG TGCATGATTT ACTCTTAGAG 1620
ATGATTCAGA GGTCACTTCA TTTTTATTAA ACAGTGAACT TGTCTGGCTT TGGCACTCTC 1680
TGCCATACTG TGCAGGCTGC AGTGGCTCCC CTGCCCAGCC TGCTCTCCCT AACCCCTTGT 1740
CCGCAAGGGG TGATGGCCGG CTGGTTGTGG GCACTGGCGG TCAATTGTGG AAGGAAGAGG 1800
GTTGGAGGCT GCCCCCATTG AGATCTTCCT GCTGAGTCCT TTCCAGGGGC CAATTTTGGA 1860
TGAGCATGGA GCTGTCACTT CTCAGCTGCT GGATGACTTG AGATGAAAAA GGAGAGACAT 1920
GGAAAGGGAG ACAGCCAGGT GGCACCTGCA GCGGCTGCCC TCTGGGGCCA CTTGGTAGTG 1980
TCCCCAGCCT ACTTCACAAG GGGATTTTGC TGATGGGTTC TTAGAGCCTT AGCAGCCCTG 2040
GATGGTGGCC AGAAATAAAG GGACCAGCCC TTCATGGGTG GTGACGTGGT AGTCACTTGT 2100
AAGGGGAACA GAAACATTTT TGTTCTTATG GGGTGAGAAT ATAGACAGTG CCCTTGGTGC 2160
GAGGGAAGCA ATTGAAAAGG AACTTGCCCT GAGCACTCCT GGTGCAGGTC TCCACCTGCA 2220
CATTGGGTGG GGCTCCTGGG AGGGAGACTC AGCCTTCCTC CTCATCCTCC CTGACCCTGA 2280
TCCTAGCACC CTGGAGAGTG AATGCCCCTT GGTCCCTGGC AGGGCGCCAA GTTTGGCACC 2340
ATGTCGGCCT CTTCAGGCCT GATAGTCATT GGAAATTGAG GTCCATGGGG GAAATCAAGG 2400
ATGCTCAGTT TAAGGTACAC TGTTTCCATG TTATGTTTCT ACACATTGAT GGTGGTGACC 2460
CTGAGTTCAA AGCCATCTT
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Seq ID NO: 588 Protein sequence
Protein Accession #: NP_005647.1

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1          11         21         31         41         51
|          |          |          |          |          |
MALNSGSPPA IGPYYENHGY QPENPYPAQP TVVPTVYEVH PAQYYPSPVP QYAPRVLTQA   60
SNPVVCTQPK SPSGTVCTSK TKKALCITLT LGTFLVGAAL AAGLLWKFMG SKCSNSGIEC  120
DSSGTCINPS NWCDGVSHCP GGEDENRCVR LYGPNFILQM YSSQRKSWHP VCQDDWNENY  180
GRAACRDMGY KNNFYSSQGI VDDSGSTSFM KLNTSAGNVD IYKKLYHSDA CSSKAVVSLR  240
CLACGVNLNS SRQSRIVGGE SALPGAWPWQ VSLHVQNVHV CGGSIITPEW IVTAAHCVEK  300
PLNNPWHWTA FAGILRQSFM FYGAGYQVQK VISHPNYDSK TKNNDIALMK LQKPLTFNDL  360
VKPVCLPNPG MMLQPEQLCW ISGWGATEEK GKTSEVLNAA KVLLIETQRC NSRYVYDNLI  420
TPAMICAGFL QGNVDSCQGD SGGPLVTSNN NIWWLIGDTS WGSGCAKAYR PGVYGNVMVF  480
TDWIYRQMKA NG
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Seq ID NO: 589 DNA sequence
Nucleic Acid Accession #: NM_001935.1
Coding sequence: 1..2301

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1          11         21         31         41         51
|          |          |          |          |          |
ATGAAGACAC CGTGGAAGAT TCTTCTGGGA CTGCTGGGTG CTGCTGCGCT TGTCACCATC   60
ATCACCGTGC CCGTGGTTCT GCTGAACAAA GGCACAGATG ATGCTACAGC TGACAGTCGC  120
AAAACTTACA CTCTAACTGA TTACTTAAAA AATACTTATA GACTGAAGTT ATACTCCTTA  180
AGATGGATTT CAGATCATGA ATATCTCTAC AAACAAGAAA ATAATATCTT GGTATTCAAT  240
GCTGAATATG GAAACAGCTC AGTTTTCTTG GAGAACAGTA CATTTGATGA GTTTGGACAT  300
TCTATCAATG ATTATTCAAT ATCTCCTGAT GGGCAGTTTA TTCTCTTAGA ATACAACTAC  360
GTGAAGCAAT GGAGGCATTC CTACACAGCT TCATATGACA TTTATGATTT AAATAAAAGG  420
CAGCTGATTA CAGAAGAGAG GATTCCAAAC AACACACAGT GGGTCACATG GTCACCAGTG  480
GGTCATAAAT TGGCATATGT TTGGAACAAT GACATTTATG TTAAAATTGA ACCAAATTTA  540
CCAAGTTACA GAATCACATG GACGGGGAAA GAAGATATAA TATATAATGG AATAACTGAC  600
TGGGTTTATG AAGAGGAAGT CTTCAGTGCC TACTCTGCTC TGTGGTGGTC TCCAAACGGC  660
ACTTTTTTAG CATATGCCCA ATTTAACGAC ACAGAAGTCC CACTTATTGA ATACTCCTTC  720
TACTCTGATG AGTCACTGCA GTACCCAAAG ACTGTACGGG TTCCATATCC AAAGGCAGGA  780
GCTGTGAATC CAACTGTAAA GTTCTTTGTT GTAAATACAG ACTCTCTCAG CTCAGTCACC  840
AATGCAACTT CCATACAAAT CACTGCTCCT GCTTCTATGT TGATAGGGGA TCACTACTTG  900
TGTGATGTGA CATGGGCAAC ACAAGAAAGA ATTTCTTTGC AGTGGCTCAG GAGGATTCAG  960
AACTATTCGG TCATGGATAT TTGTGACTAT GATGAATCCA GTGGAAGATG GAACTGCTTA 1020
GTGGCACGGC AACACATTGA AATGAGTACT ACTGGCTGGG TTGGAAGATT TAGGCCTTCA 1080
GAACCTCATT TTACCCTTGA TGGTAATAGC TTCTACAAGA TCATCAGCAA TGAAGAAGGT 1140
TACAGACACA TTTGCTATTT CCAAATAGAT AAAAAAGACT GCACATTTAT TACAAAAGGC 1200
ACCTGGGAAG TCATCGGGAT AGAAGCTCTA ACCAGTGATT ATCTATACTA CATTAGTAAT 1260
GAATATAAAG GAATGCCAGG AGGGAAGGAAT CTTTATAAAA TCCAACTTAG TGACTATACA 1320
AAAGTGACAT GCCTCAGTTG TGAGCTGAAT CCGGAAAGGT GTCAGTACTA TTCTGTGTCA 1380
TTCAGTAAAG AGGCGAAGTA TTATCAGCTG AGATGTTCCG GTCCTGGTCT GCCCCTCTAT 1440
ACTCTACACA GCAGCGTGAA TGATAAAGGG CTGAGAGTCC TGGAAGACAA TTCAGCTTTG 1500
GATAAAATGC TGCAGAATGT CCAGATGCCC TCCAAAAAAC TGGACTTCAT TATTTTGAAT 1560
GAAACAAAAT TTTGGTATCA GATGATCTTG CCTCCTCATT TTGATAAATC CAAGAAAATAT 1620
CCTCTACTAT TAGATGTGTA TGCAGGCCCA TGTAGTCAAA AAGCAGACAC TGTCTTCAGA 1680
CTGAACTGGG CCACTTACCT TGCAAGCACA GAAAACATTA TAGTAGCTAG CTTTGATGGC 1740
AGAGGAAGTG GTTACCAAGG AGATAAGATC ATGCATGCAA TCAACAGAAG ACTGGGAACA 1800
TTTGAAGTTG AAGATCAAAT TGAAGCAGCC AGACAATTTT CAAAAATGGG ATTTGTGGAC 1860
AACAAACGAA TTGCAATTTG GGGCTGGTCA TATGGAGGGT ACGTAACCTC AATGGTCCTG 1920
GGATCGGGAA GTGGCGTGTT CAAGTGTGGA ATAGCCGTGG CGCCTGTATC CCGGTGGGAG 1980
TACTATGACT CAGTGTACAC AGAACGTTAC ATGGGTCTCC CAACTCCAGA AGACAACCTT 2040
GACCATTACA GAAATTCAAC AGTCATGAGC AGAGCTGAAA ATTTTAAACA AGTTGAGTAC 2100
CTCCTTATTC ATGGAACAGC AGATGATAAC GTTCACTTTC AGCAGTCAGC TCAGATCTCC 2160
AAAGCCCTGG TCGATGTTGG AGTGGATTTC CAGGCAATGT GGTATACTGA TGAAGACCAT 2220
GGAATAGCTA GCAGCACAGC ACACCAACAT ATATATACCC ACATGAGCCA CTTCATAAAA 2280
CAATGTTTCT CTTTACCTTA G
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Seq ID NO: 590 Protein sequence
Protein Accession #: NP_001926.1

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1          11         21         31         41         51
|          |          |          |          |          |
MKTPWKILLG LLGAAALVTI ITVPVVLLNK GTDDATADSR KTYTLTDYLK NTYRLKLYSL   60
```

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      RWISDHEYLY KQENNILVFN AEYGNSSVFL ENSTFDEFGH SINDYSISPD GQFILLEYNY  120
      VKQWRHSYTA SYDIYDLNKR QLITEERIPN NTQWVTWSPV GHKLAYVWNN DIYVKIEPNL  180
      PSYRITWTGK EDIIYNGITD WVYEEEVFSA YSALWWSPNG TFLAYAQFND TEVPLIEYSF  240
5     YSDESLQYPK TVRVPYPKAG AVNPTVKFFV VNTDSLSSVT NATSIQITAP ASMLIGDHYL  300
      CDVTWATQER ISLQWLRRIQ NYSVMDICDY DESSGRWNCL VARQHIEMST TGWVGRFRPS  360
      EPHFTLDGNS FYKIISNEEG YRHICYFQID KKDCTFITKG TWEVIGIEAL TSDYLYYISN  420
      EYKGMPGGRN LYKIQLSDYT KVTCLSCELN PERCQYYSVS FSKEAKYYQL RCSGPGLPLY  480
      TLHSSVNDKG LRVLEDNSAL DKMLQNVQMP SKKLDFIILN ETKFWYQMIL PPHFDKSKKY  540
10    PLLLDVYAGP CSQKADTVFR LNWATYLAST ENIIVASFDG RGSGYQGDKI MHAINRRLGT  600
      FEVEDQIEAA RQFSKMGFVD NKRIAIWGNS YGGYVTSMVL GSGSGVFKCG IAVAPVSRWE  660
      YYDSVYTERY MGLPTPEDNL DHYRNSTVMS RAENFKQVEY LLIHGTADDN VHFQQSAQIS  720
      KALVDVGVDF QAMWYTDEDH GIASSTAHQH IYTHMSHFIK QCFSLP
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Seq ID NO: 591 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_016077.1
Coding sequence: 128..667

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      1          11         21         31         41         51
      |          |          |          |          |          |
      TCGCTTTGTG ATTCTTGATC CGGAACTTTG TCACCCAGGA ACCCCGGAAG AGGTAGCTCA   60
      CGCGATAGAA ACGTGTTCGC TTGCCCAGAA GAAGGGAAGG CGCGAGTGAG GAAAGGAGGT  120
      ACTGTAGATG CCCTCCAAAT CCTTGGTTAT GGAATATTTG GCTCATCCCA GTACACTCGG  180
      CTTGGCTGTT GGAGTTGCTT GTGGCATGTG CCTGGGCTGG AGCCTTCGAG TATGCTTTGG  240
      GATGCTCCCC AAAAGCAAGA CGAGCAAGAC ACACACAGAT ACTGAAAGTG AAGCAAGCAT  300
      CTTGGGAGAC AGCGGGGAGT ACAAGATGAT TCTTGTGGTT CGAAATGACT TAAAGATGGG  360
      AAAAGGGAAA GTGGCTGCCC AGTGCTCTCA TGCTGCTGTT TCAGCCTACA AGCAGATTCA  420
      AAGAAGAAAT CCTGAAATGC TCAAACAATG GGAATACTGT GGCCAGCCCA AGGTGGTGGT  480
      CAAAGCTCCT GATGAAGAAA CCCTGATTGC ATTATTGGCC CATGCAAAAA TGCTGGGACT  540
      GACTGTAAGT TTAATTCAAG ATGCTGGACG TACTCAGATT GCACCAGGCT CTCAAACTGT  600
      CCTAGGGATT GGGCCAGGAC CAGCAGACCT AATTGACAAA GTCACTGGTC ACCTAAAACT  660
      TTACTAGGTG GACTTTGATA TGACAACAAC CCCTCCATCA CAAGTGTTTG AAGCCTGTCA  720
      GATTCTAACA ACAAAAGCTG AATTTCTTCA CCCAACTTAA ATGTTCTTGA GATGAAAATA  780
      AAACCTATTC CCATGTTCTA AAAAAA
```

Seq ID NO: 592 <u>Protein sequence</u>
Protein Accession #: NP_057161.1

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      1          11         21         31         41         51
      |          |          |          |          |          |
      MPSKSLVMEY LAHPSTLGLA VGVACGMCLG WSLRVCFGML PKSKTSKTHT DTESEASILG   60
      DSGEYKMILV VRNDLKMGKG KVAAQCSHAA VSAYKQIQRR NPEMLKQWEY CGQPKVVVKA  120
      PDEETLIALL AHAKMLGLTV SLIQDAGRTQ IAPGSQTVLG IGPGPADLID KVTGHLKLY
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Seq ID NO: 593 <u>DNA sequence</u>
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..1896

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      1          11         21         31         41         51
      |          |          |          |          |          |
      ATGCGCGCCG TGCCGCTGCC CGCCCCGCTC CTGCCGCTGC TGCTGCTCGC GCTCCTGGCC   60
      GCTCCGCTCG CCCGCGCCAG CAGAGCCGAG TCCGTCTCCG CGCCGTGGCC CGAACCCGAG  120
      CGCGAGTCGC GGCCCACCGCC CGGCCCGGGG CCCGGGAACA CCACCCGGTT TGGGTCTGGG  180
      GCGGCGGGCG GCAGCGGCAG CTCCAGCTCC AACAGCAGTG GCGACGCCTT GGTGACCCGC  240
      ATTTCCATCC TCCTCCGCGA CCTACCCACC CTCAAGGCAG CCGTGATCGT GGCGTTCGCC  300
      TTTACCACCC TCCTCATCGC CTGCCTGCTG CTGCGCGTCT TCAGGTCGGG AAAAGAGGTTA  360
      AAGAAGACAC GCAAGTATGA TATCATCACC ACTCCAGCAG AGCGAGTGGA AATGGCGCCA  420
      CTAAATGAAG AGGATGATGA AGATGAGGAC TCCACAGTAT TCGACATCAA ATACAGAGTG  480
      TCCTTGCCGG CTGCACTGAG ACGTCAGCTG CCAGGGTGCC AGACGCTACT GACAGTTCCT  540
      GTGCCCCCAC CCTTCATCCT CGACATTGAC CTTCCAGCAA GATGCAGTGG AAGGCCTGAT  600
      GGTGGAATCA GACCTGGTAA AAACCTGTTTC CCAGCCTGGT GGCATCCTGT GGAAAGTTGG  660
      TCAGCTGCAA CCTGGGGTGT GAAGGACTGG ACCTGGAAGC CCTCTTGCGT CGGAGGTGTT  720
      GAAACCAAAA CGAACGTTAT GTATAAAACC CCAGCTCCAT CGTGCGTGTC AGGCATCTGC  780
      TCAGACTGTC ACTGGCAAGC TCGTTTCCAC GTCACCACAA TGGAGTTGCT TCTGCCACCC  840
      TTTGGCATC CCTTTAAAGT GCCCCCTACT TCTACTCCCC ATGGTTTTCG ACAACTGCAG  900
      CTGAATCTCA TGGAAAAGCT GGATTCCTCT GCCTTACGCA GAAACACCCG GGCTCCATCT  960
      GCCAGGTGCT TGCCACTGGT CCTGGCAGAA ATGGCGGCTG CTGAAAGTGA CCTTCCAAAT 1020
      CCTTGGTGGC ACTTCAGCGC CACAGGCTCT CCAATAAAAA CCCTTTACAC ACAAACCATG 1080
      AGTACCTTGG GCTTGGATGT TTTCTGTGGT GCCGGCCAGC GGGGCACCTT TTGTGAAGAC 1140
      AGAGCAGTGA CTAAGGTTCT CCAGGGTAGC TCTTTCTCCA AACAGCTGCG CTGGAAGCCA 1200
      GCCCTAGAGA GTGGGTTTCC CCATCATCTC AGGCTTCTCA GAGAGTGTCC TCCGCTGAGC 1260
      ACCCATCCTG TCAGGTTGGC TCGTTCAGAT GCCCGGGGAC AAGCCAGCCT GACGGGGAGG 1320
      AGGGTGTTTC GGCGTCCGCG GCAGTCTCTG CATGGCGGAG GGTCAGCGGG TACCGCAACT 1380
      TGCCTTTTGG TTTTGAAGAT TCTGTTGAGG CGCCATCCTC ACCTTGACCT CTTCTACAAA 1440
      ATCTGTCTCC CCTGCTGTGC CGTGGAACAC CTACGGGAAG CCAAGAGAAG CTCAGTGACT 1500
      GTCTTGCGT CATTTGAGCA GAGCCCACAA AAGGCAGCTG CTGCCCACGG GGAGCCTGTC 1560
      AAACGAGGGC CCAGTGGGCA ATTGACCAGA CACACATGCC CTGGCTGGGG GATCACACAT 1620
      GCGAACCTGC AGACAATTCC AGATACCCAA GGCCAGGAAG GCCCACGTGA GGATGTCACT 1680
      CACCCTGGAG GAGACTTGGA TGGGGTGGCA AATTTCTATT TGGAGGAAGA GGGTTTCCAG 1740
      GATGGCAGAT GCCAGAAGAT GGTCCTGATG TCTGAGGAAG GGCCACCTAG TTTGACAGGA 1800
      TGTGAGAGGC TCACAGGTTC CCATCACTTC TCCAGCCATT CCAAGTCTTG GTCCTTCCTT 1860
      TCCCCCCGAC AGCCCCTGTT TCTGTCCAGG CCCTGA
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Seq ID NO: 594 <u>Protein sequence</u>
Protein Accession #: FGENESH predicted

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          1         11        21        31        41        51
          |         |         |         |         |         |
     MRAVPLPAPL LPLLLLALLA APAARASRAE SVSAPWPEPE RESRPPPGPG PGNTTRFGSG    60
     AAGGSGSSSS NSSGDALVTR ISILLRDLPT LKAAVIVAFA FTTLLIACLL LRVFRSGKRL   120
     KKTRKYDIIT TPAERVEMAP LNEEDDEDED STVFDIKYRV SLPAALRRQL PGCQTLLTVP   180
     VPPPFILDID LPARCSGRPD GGIRPGKTCF PAWWHPVESW SAATWGVKDW TWKPSCVGGV   240
     ETKTNVMYKT PAPSCVSGIC SDCHWQARFH VTTMELLLPP FGHPFKVPPT STPHGFRQLQ   300
     LNLMEKLDSS ALRRNTRAPS ARCLPLVLAE MAAAESDLPN PWWHFSATGS PIKTLYTQTM   360
     STLGLDVFCG AGQRGTFCED RAVTKVLQGS SFSKQLRWKP ALESGFPHHL RLLRECPPLS   420
     THPVRLARSD ARGQASLTGR RVFRRPRQSL HGGGSAGTAT CLLVLKILLR RHPHLDLFYK   480
     ICLPCCAVEH LREAKRSSVT VLASFEQSPQ KAAAAHGEPV KRGPSGQLTR HTCPGWGITH   540
     ANLQTIPDTQ GQEGPREDVT HPGGDLDGVA NFYLEEEGFQ DGRCQKMVLM SEEGPPSLTG   600
     CERLTGSHHF SSHSKSWSFL SPRQPLFLSR P
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Seq ID NO: 595 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_021614.1
Coding sequence: 1..1740

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          1         11        21        31        41        51
          |         |         |         |         |         |
     ATGAGCAGCT GCAGGTACAA CGGGGGCGTC ATGCGGCCGC TCAGCAACTT GAGCGCGTCC    60
     CGCCGGAACC TGCACGAGAT GGACTCAGAG GCGCAGCCCC TGCAGCCCCC CGCGTCTGTC   120
     GGAGGAGGTG GCGGCGCGTC CTCCCCGTCT GCAGCCGCTG CCGCCGCCGC CGCTGTTTCG   180
     TCCTCAGCCC CCGAGATCGT GGTGTCTAAG CCCGAGCACA ACAACTCCAA CAACCTGGCA   240
     CTCTATGGAA CCGGCGGCGG AGGCAGCACT GGAGGAGGCG GCGGCGGTGG CGGGAGCGGG   300
     CACGGCAGCA GCAGTGGCAC CAAGTCCAGC AAAAAGAAAA ACCAGAACAT CGGCTACAAG   360
     CTGGGCCACC GGCGCGCCCT GTTCGAAAAG CGCAAGCGGC TCAGCGACTA CGCGCTCATC   420
     TTCGGCATGT TCGGCATCGT GGTCATGGTC ATCGAGACCG AGCTGTCGTG GGGCGCCTAC   480
     GACAAGGCGT CGCTGTATTC CTTAGCTCTG AAATGCCTTA TCAGTCTCTC CACGATCATC   540
     CTGCTCGGTC TGATCATCGT GTACCACGCC AGGGAAATAC AGTTGTTCAT GGTGGACAAT   600
     GGAGCAGATG ACTGGAGAAT AGCCATGACT TATGAGCGTA TTTTCTTCAT CTGCTTGGAA   660
     ATACTGGTGT GTGCTATTCA TCCCATACCT GGGAATTATA CATTCACATG GACGGCCCGG   720
     CTTGCCTTCT CCTATGCCCC ATCCACAACC ACCGCTGATG TTTTATCTATA TTTATCTATA   780
     CCAATGTTCT TAAGACTCTA TCTGATTGCC AGAGTCATGC TTTTACATAG CAAACTTTTC   840
     ACTGATGCCT CCTCTAGAAG CATTGGAGCA CTTAATAAGA TAAACTTCAA TACACGTTTT   900
     GTTATGAAGA CTTTAATGAC TATATGCCCA GGAACTGTAC TCTTGGTTTT TAGTATCTCA   960
     TTATGGATAA TTGCCGCATG GACTGTCCGA GCTTGTGAAA GGTACCATGA TCAACAGGAT  1020
     GTTACTAGCA ACTTCCTTGG AGCGATGTGG TTGATATCAA TAACTTTTCT CTCCATTGGT  1080
     TATGGTGACA TGGTACCTAA CACATACTGT GGAAAAGGAG TCTGCTTACT TACTGGAATT  1140
     ATGGGTGCTG GTTGCACAGC CCTGGTGGTA GCTGTAGTGG CAAGGAAGCT AGAACTTACC  1200
     AAAGCAGAAA AACACGTGCA CAATTTCATG ATGGATACTC AGCTGACTAA AAGAGTAAAA  1260
     AATGCAGCTG CCAATGTACT CAGGGAAACA TGGCTAATTT ACAAAAATAC AAAGCTAGTG  1320
     AAAAAGATAG ATCATGCAAA AGTAAGAAAA CATCAACGAA AATTCCTGCA AGCTATTCAT  1380
     CAATTAAGAA GTGTAAAAAT GGAGCAGAGG AAACTGAATG ACCAAGCAAA CACTTTGGTG  1440
     GACTTGGCAA AGACCCAGAA CATCATGTAT GATATGATTT CTGACTTAAA CGAAAGGAGT  1500
     GAAGACTTCG AGAAGAGGAT TGTTACCCTG GAAACAAAAC TAGAGACTTT GATTGGTAGC  1560
     ATCCACGCCC TCCCTGGGCT CATAAGCCAG ACCATCAGGC AGCAGCAGAG AGATTTCATT  1620
     GAGGCTCAGA TGGAGAGCTA CGACAAGCAC GTCACTTACA ATGCTGAGCG GTCCCGGTCC  1680
     TCGTCCAGGA GGCGGCGGTC CTCTTCCACA GCACCACCAA CTTCATCAGA GAGTAGCTAG
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Seq ID NO: 596 <u>Protein sequence</u>
Protein Accession #: NP_067627.1

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          1         11        21        31        41        51
          |         |         |         |         |         |
     MSSCRYNGGV MRPLSNLSAS RRNLHEMDSE AQPLQPPASV GGGGGASSPS AAAAAAAAVS    60
     SSAPEIVVSK PEHNNSNNLA LYGTGGGGST GGGGGGGGSG HGSSSGTKSS KKKNQNIGYK   120
     LGHRRALFEK RKRLSDYALI FGMFGIVVMV IETELSWGAY DKASLYSLAL KCLISLSTII   180
     LLGLIIVYHA REIQLFMVDN GADDWRIAMT YERIFFICLE ILVCAIHPIP GNYTFTWTAR   240
     LAFSYAPSTT TADVDIILSI PMFLRLYLIA RVMLLHSKLF TDASSRSIGA LNKINFNTRF   300
     VMKTLMTICP GTVLLVFSIS LWIIAAWTVR ACERYHDQQD VTSNFLGAMW LISITFLSIG   360
     YGDMVPNTYC GKGVCLLTGI MGAGCTALVV AVVARKLELT KAEKHVHNFM MDTQLTKRVK   420
     NAAANVLRET WLIYKNTKLV KKIDHAKVRK HQRKFLQAIH QLRSVKMEQR KLNDQANTLV   480
     DLAKTQNIMY DMISDLNERS EDFEKRIVTL ETKLETLIGS IHALPGLISQ TIRQQQRDFI   540
     EAQMESYDKH VTYNAERSRS SSRRRRSSST APPTSSESS
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Seq ID NO: 597 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_016029.1
Coding sequence: 228..1097

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          1         11        21        31        41        51
          |         |         |         |         |         |
     CTGCGATCCC GCAGGGCAGC GACGCGACTC TGGTGCGGGC CGTCTTCTTC CCCCCGAGCT    60
     GGGCGTGCGC GGCCGCAATG AACTGGGAGC TGCTGCTGTG GCTGCTGGTG CTGTGCGCGC   120
     TGCTCCTGCT CTTGGTGCAG CTGCTGCGCT TCCTGAGGGC TGACGGCGAC CTGACGCTAC   180
     TATGGGCCGA GTGGCAGGGA CGACGCCCAG AATGGGAGCT GACTGATATG GTGGTGTGGG   240
     TGACTGGAGC CTCGAGTGGA ATTGGTGAGG AGCTGGCTTA CCAGTTGTCT AAACTAGGAG   300
     TTTCTCTTGT GCTGTCAGCC AGAAGAGTGC ATGAGCTGGA AAGGGTGAAA AGAAGATGCC   360
     TAGAGAATGG CAATTTAAAA GAAAAAGATA TACTTGTTTT GCCCCTTGAC CTGACCGACA   420
     CTGGTTCCCA TGAAGCGGCT ACCAAAGCTG TTCTCCAGGA GTTTGGTAGA ATCGACATTC   480
     TGGTCAACAA TGGTGGAATG TCCCAGCGTT CTCTGTGCAT GGATACGGTC TTGGATGTCT   540
     ACAGAAAGCT AATAGAGCTT AACTACTTAG GGACGGTGTC CTTGACAAAA TGTGTTCTGC   600
     CTCACATGAT CGAGAGGAAG CAAGGAAAGA TTGTTACTGT GAATAGCATC CTGGGTATCA   660
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TATCTGTACC TCTTTCCATT GGATACTGTG CTAGCAAGCA TGCTCTCCGG GGTTTTTTTA   720
ATGGCCTTCG AACAGAACTT GCCACATACC CAGGTATAAT AGTTTCTAAC ATTTGCCCAG   780
GACCTGTGCA ATCAAATATT GTGGAGAATT CCCTAGCTGG AGAAGTCACA AAGACTATAG   840
GCAATAATGG AGACCAGTCC CACAAGATGA CAACCAGTCG TTGTGTGCGG CTGATGTTAA   900
TCAGCATGGC CAATGATTTG AAAGAAGTTT GGATCTCAGA ACAACCTTTC TTGTTAGTAA   960
CATATTTGTG GCAATACATG CCAACCTGGG CCTGGTGGAT AACCAACAAG ATGGGGAGAA   1020
AAAGGATTGA GAACTTTAAG AGTGGTGTGG ATGCAGACTC TTCTTATTTT AAAATCTTTA   1080
AGACAAAACA TGACTGAAAA GAGCACCTGT ACTTTTCAAG CCACTGGAGG GAGAAATGGA   1140
AAACATGAAA ACAGCAATCT TCTTATGCTT CTGAATAATC AAAGACTAAT TTGTGATTTT   1200
ACTTTTTAAT AGATATGACT TTGCTTCCAA CATGGAATGA AATAAAAAAT AAATAATAAA   1260
AGATTGCCAT GAATCTTGCA AA
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Seq ID NO: 598 <u>Protein sequence</u>
Protein Accession #: NP_057113.1

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1          11         21         31         41         51
|          |          |          |          |          |
MNWELLLWLL VLCALLLLLV QLLRFLRADG DLTLLWAEWQ GRRPEWELTD MVVWVTGASS   60
GIGEELAYQL SKLGVSLVLS ARRVHELERV KRRCLENGNL KEKDILVLPL DLTDTGSHEA   120
ATKAVLQEFG RIDILVNNGG MSQRSLCMDT SLDVYRKLIE LNYLGTVSLT KCVLPHMIER   180
KQGKIVTVNS ILGIISVPLS IGYCASKHAL RGFFNGLRTE LATYPGIIVS NICPGPVQSN   240
IVENSLAGEV TKTIGNNGDQ SHKMTTSRCV RLMLISMAND LKEVWISEQP FLLVTYLWQY   300
MPTWAWWITN KMGKKRIENF KSGVDADSSY FKIFKTKHD
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Seq ID NO: 599 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_000793.2
Coding sequence: 401..1222

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1          11         21         31         41         51
|          |          |          |          |          |
GCCTGCAGAG AGAGGCACTT TGCACCACAG ACAGATAGCA AGAAGGGAAA GACAGAGAGT   60
GAGAAAAAAG AGGAGTCAGT CGCTCCTGGG GAAGGGAGAG AGTGAGACTG GGAGAAAGAG   120
AAGCACAGAA AGTGTGTGTA AAACGGAGTA AAGAAAGAAA AAAAAAAAAC TACCCTTAAA   180
GCACATTTAA AAAAAAAAAA CTCTGGCAAT TCAAGAAAGA AACAGGCTAC GTTTAAAGAG   240
CATAGAGACA ATGAAAGGCT AAAGAAAATT TTAAAATCTC TGCCACAGTC TCATAGGTGC   300
TTGGAAATGA AAGTAGAACT GCCTGTCTTT AACGGACTCT GACAGAGAGG GTGAAGGGGA   360
ACCAGAGCGC ACAAGGGAAC TGACTCAGGA GGCAGAGAAG ATGGGCATCC TCAGCGTAGA   420
CTTGCTGATC ACACTGCAAA TTCTGCCAGT TTTTTTCTCC AACTGCCTCT TCCTGGCCTT   480
CTATGACTCG GTCATTCTGC TCAAGCACGT GGTGCTGCTG TTGAGCCGCT CCAAGTCCAC   540
TCGCGGGAGG TGGCGGCGCA TGCTGACCTC AGAGGGACTG CGCTGCGTCT GGAAGAGCTT   600
CCTCCTCGAT GCCTACAAAC AGGTGAAATT GGGTGAGGAT GCCCCCAATT CCAGTGTGGT   660
GCATGTCTCC AGTACGAAG GAGGTGACAA CAGTGGCAAT GGTACCCAGG AGAAGATAGC   720
TGAGGGAGCC ACATGCCACC TTCTTGACTT TGCCAGCCCT GAGCGCCCAC TAGTGGTCAA   780
CTTTGGCTCA GCCACTTGAC CTCCTTTCAC GAGCCAGCTG CCAGCCTTCC GCAAACTGGT   840
GGAAGAGTTC TCCTCAGTGG CTGACTTCCT GCTGGTCTAC ATTGATGAGG CTCATCCATC   900
AGATGGCTGG GCGATACCGG GGGACTCCTC TTTGTCTTTT GAGGTGAAGA AGCACCAGAA   960
CCAGGAAGAT CGATGTGCAG CAGCCCAGCA GCTTCTGGAG CGTTCTCCT TGCCGCCCCA   1020
GTGCCGAGTT GTGGCTGACC GCATGGACAA TAACGCCAAC ATAGCTTACG GGGTAGCCTT   1080
TGAACGTGTG TGCATTGTGC AGAGACAGAA AATTGCTTAT CTGGGAGGAA AGGGCCCCTT   1140
CTCCTACAAC CTTCAAGAAG TCCGGCATTG GCTGGAGAAG AATTTCAGCA AGAGATGAAA   1200
GAAAACTAGA TTAGCTGGTT AAAGGTATGA TTATAAGAGA GCTTATTGTT TTAAAAAGTT   1260
ATATAAAGGC AAGGAAATTA AGAACTGAAT CCATATTTCA ACAGAGCCCT ATTGGCTTAC   1320
TGAAAGACAG GAGTTTATCT ATCGGAAGAA CATGAATCTC TAACAGCTCC ATACTTCTTT   1380
CACTACTCAA ATGGCATTGG GCTGAGTAAG TAACCATATC ACCTCTCTTC TTAGTAAAAA   1440
GCCCTATGTG AAAAGATCCC AAGATGGAGA GGAAGAAACG CTAATTCAGC ATGTGTTCAT   1500
TCTGCATTGA GAAGGAACTG ATACATCTGA TGCATGCTTT GAGACCAGAA GAAAAGACTT   1560
ACCTGAATAA TTACTACATT AGGGAAGCTA CTGTCTACGT TAAGATAAAG GGTATTGCCT   1620
TGGCTCTATT TGGCATGGAT GGAGCCCAGT TGGAAAATTC CCAAATATTA CAACAAGTCC   1680
TTGAACCCAG GCCATGTGGT TAGACGTTGG TGTTAAGGTT AGACCTTATG TTAGAGTCAT   1740
TTCTGATGTT CCAGCTTCTA GCCATGTAGT GCTCTCAGTC TGTATACCCC AGAAATTATT   1800
GGTATATTTG TAGATACCGA GAATGATCCC TCAGTCTGAG AGGTTAGAAT GATCATCTGT   1860
AATCTGAGGG TTAAATTTCTA GGCAGGTGGA GAGAGTGGTA AAAAAGAAAT GAAATTGACA   1920
AGCTAGGCAAA GAGGAGGCAG AAAGATTTGG AAAATTCACA GAGTTTCACC CTTAAGCTGT   1980
AGAGAGTGGG TCACATTTGT TAGCCACGGA AACATAGAAA CATACACAAG GCCAGAAAAA   2040
GAAGAAGGAG CTCAACTAAA AGTGGCATAG AGAATACACA TATAAAAACA ATATATTTGT   2100
CATATGCTCC TAGAGAGGAG AAAGGGGTGA TTGAAAGAAA AAAAAATACT TAAATATTTG   2160
TAATTGTGAG GGGTTTCTTT TGGAAATAAT TACTTTTGAA CCATGTATGT GGTATGTATA   2220
TTTTCAGTGG GTTAATTATA CCCCATGATA CCTATTAAAG GAAAACCAGT GGGTCTGGTG   2280
GTGCTGGTCT TTTCCTCCCC ATTCCTACAA TTTCTATGTG GCCCAAGTCA TTCCTAATCT   2340
TGGTCTCTAT AGCAGTGTTC TCTCTGAATG CTGAGCTGAA GAAATTATAC GTACATACAC   2400
ACATACATAC ATACATACAA ATATATGTAT ATATATTCTC AGCTGCTGCG GGAGGTAGGT   2460
ACCATGGCCA TTCAGCACAG CCTTGATTTC CTCCCAAAGT AGGTGAGCTA TAGTGAAGAA   2520
TAGGTGCAAA CAAACAAGCT TACTTCCATT GCAAAATAGA AGAAGAGGAA GTTAGAGATA   2580
ATTCTGATCA ATCATTTTGG AGGCTTTGTT ATAAGGCAAC CCCCGTATA TCATGGAATT   2640
TCCATTGACA TTTGAATTTG GACTTGGATC TTCCCCTTGGT CCCATTAGCT GAGGTTTAGT   2700
AATCTAAAGT CCCTATAGTA TATGATTATA ATGCTATTTT AAAAAATATA TATATAAAAT   2760
ATTTTTTTCT TTTTAAAATA GACACTATAG TTTTACCCAT AAGTAATATT TAAAGATTAT   2820
AGCTCCCAAA AGAATGGACC AACCACTTTC GTATCATAAT TTCTTTTTTGG TAAATATGAG   2880
ACTATTATGA AATCATAGTA TATGATTGTA TTTAAAGGTA CAATCAAAGG ATCTTTTGTC   2940
CATTCCATTA ATAACTGAAT AAAAAATAAA TAAAATGGAT AGAAAAAAAC TAAAGTTGAA   3000
AATACATTCT TAAACTAGTT GTCTGAAATG AGAAAAGAGT GAGAACTAGG TGTGCAAGAA   3060
CCAAACGTAT TTTATTTTAT TTTTTAAAATG GGAGCAACAT ATCAGTCGTG TCACCAGCTG   3120
GTATATTGTG TAAATATTAA AGCTCCATTG GGACTGATTT TTCATGGCAA CATCAGCTTT   3180
CTAATGTTCT AAATTCTATA AAAACCACCC ACAAAGAAAC AAAGCAAATT TCATTTATCTA   3240
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        ATGAGTTGCT GGAAAATCAT ATTGAGAATA ATTATTTCAG ATTCCTCAGT TGTTAACTTC  3300
        TACATTCAAG GGCTTATCTC TGCCCCCATT GATTTTTAAC CTCAAAATGG TGTGAGATTT  3360
        ACTGTGGAAC CCTAAAGCAG TAAAATAAAA AACCTGGTTG CAGCACATTC ACACTGTTGT  3420
        CCTTAAAATT CCCCTTTTTT CTCTATGTAC GATAAAGTAA CAGTATGTCA GATAAGCCGG  3480
        TGGGGGGATG AGATTAGGCT GAGGCAGTGC TAGTCAACTG GGGGAAAAGG ATGATGGAAA  3540
        AATCACCCAG TTGTGCTATA TTTTTAAAGA AGGAGGTCGT TTATGTGTGC AGACAATTCT  3600
        CCCTGAGGTT AGCCCAATGG AGAAATGAAG CAGAGGAAGG AAACATAGAA AGACATGGGC  3660
        TATCAGGGAG GAAGATGTTC AATAGAACAT GCAAGAATTT CTGGAAGAAA GGCTGTGGAA  3720
        GGGCCAATGG AGAAAATGAA TGGACAAAGC TCAGGAATCC CTACGCTATG TAGAATGTTC  3780
        TTGGTGTTAT CAGGGTTAAG CCCTGTAATT ATGTAACCTA TTTATCGCAA CATGAATTTT  3840
        TATGATTTCT TGTGATGTAT TCTTTTATGA AATTAACAAG AACTCATTAT TTTGAGGTAG  3900
        AGGAAAATCA ATGCTTTATC TGATATGCTG AGAAATTATT AGATTGCCAA TACTCATGTG  3960
        CGTTTCATGT GTTTTATAAG GTTTGTTCCT TTGAAGAATT GTAGTTCTTA GTCCCACAGG  4020
        GAAATGTGTA TCTATTTATA TATCATAGTA TAAATCTATG ATATATTTAT ATCATATATA  4080
        AAAGTCTGAG TTCTCTTTCT TAGTCCCTAA TCATGTTTCT CCCATAGGCT GTGTTTACAT  4140
        GGAGCTATCG GTTTAGCCTT TTAAGCTTCA TTAGCTTGTC TATTATTGAA ATAGTTTCCA  4200
        AGAAATTTTA GATATTATCA TAACATCTGG GTCTACTCAA ACACTTATTG TTTGAAAGAC  4260
        TTATGTCTTG GACCTATCAA AAACTGACTT TATTTATTGC TTAGTGAAAA TACTAGTGGG  4320
        ATCAACAATG ATTTTCTTGA ATGGGCATGA ATGGAGATGC CCGCACAGTA ATGTAGAAAT  4380
        GTTTCATACA GCTATTAAAA TGTAACTGAC CTCCTTAGAG GCAGATTAGT AACTGTTCCT  4440
        ACTTTGTATA GCTAAGTGAC AGTCACTTAA CTTACATGAC TTTCTTTTTT CACATTGGGT  4500
        CTCTGGTCCT GTGTCTTCAC CTCATTTATA GCACGTCTCC TTGATTTTTG GTAGTATCAA  4560
        CTTCCCAGTG ATCTGTTCAG TTAAGTTCTT CTCCCGTTAA CCAGGAAGTG CTTATTCTCT  4620
        CATCACAGTG GGAAGAATAG CCTATTGTCT TTCATTTTGC CTGAGTGTAT TTTACTATTT  4680
        GGGCTCTGAA ATAAAAATTA TGAAATATGG TGAGGTCACA TGTTGGTGCT GCCTTGCTGC  4740
        ATAAAAATTCT AGGAGGGCAG GTTAGGAGAC AGTTATGTAT GGCCTTTCGG GAAAATTCAA  4800
        AGGGTGGGAT TACAAGGGTG TTCCTCAGGC ATGCCCCTAT GGGCCCTATG TGGAAGCAAG  4860
        AAGAATTGCA TGATTTACAG GACTTCTCTT TATGTCAATC TTAAGAGGAT GGATGAAATCT  4920
        GGACATTTGT TCCACCCGAC CTCTGACTGA TGGTTTGGAA AATAACTTTA ATTAGGATCA  4980
        TATGACCATT GAAAAAGGAA AAATGTAGAC TCTGACTTCC GTCCCACTGA AGGATTAATG  5040
        AAAACCTTTA CTAGCATTTA GAGCTTTTCA GAACATCCCC ACTGTCATGT GTCTCAGCAG  5100
        TGGAGACTGC AAGTAAGGCT TTTAATTTTA GGAGGTTTTT TTTTTTTTTT TTTTTTCCCC  5160
        TAAATGGTAT GGCCAAAAGT CAGAGTTAAA ATATATATAG TTAGATTCCA ACTTCCTCCT  5220
        TCACTCTAAA AATAGAATCC AAACCCACTC TTCATATATG CTTCCAGAAT GGGGCTTAAG  5280
        TACCAATCTC TGCTTTGCAA TGGGCACAAT CTTGGTCATG TCCTGAGGCT CTCTAAGAAA  5340
        AGAGAGGATC TAGGATGGGA GAGCTAGAAA GTTGCTAACT GGGAAGAACA AGGCCCTGAG  5400
        GGGTTGGTCT ACCAATCTGG GAAGATTTGA AAACAAACTT CTCGCAACTG AAGGAAGGCT  5460
        GAAGGCTGCT GCAAGTCATT GAGTGACTTT AGGATGAGCA AAACATTGGG CCACTTCCTA  5520
        ATGCCCTATG TGTATAGTAC CAGAAGCAAG GTCTCAGACT TAACAGACCC AGCTCTGTTC  5580
        CAAGGTGAGT CTGAACCAAT AGAAAGCAAA CATGTGCAGA TATCCAAACA AGACTGCTCA  5640
        TGCAAGTCGG GGCTGGCTAC CCGTCTTAGG CAGCAACAGC AGAGCTCCAG GGAGCTTATT  5700
        CAATATTTAC TGAGACTTCG AAGACCCAGC AGATGTTTAA TGAAGTCACT ATTTTGGCTC  5760
        AAACCCTCCA CTTCTCCCCC TCCCCTCAAA AAGCCAACAG GTAAACACAT AAATGAAAGA  5820
        AACCCACAGA AGGGGATGGG AAATAAAGAA AATTCTCTCA AGACTTCTCC AGGCCCATGT  5880
        CACTGGTCAG CGTGGTTTTT ATGTGTATTA GGATTGGGGG ATGTGAAGAA ATAAGTATCC  5940
        AGTACTTTAT AACCAAAGCA ATTAAATGAT ATTGGGGTAG GGAATGTTGG CCAGTTTTGT  6000
        TTAGTTTTGC CATCACATTG TCACCCAGAC CTCACCTAGC CCCAAGTAAT CGGGCGCCCC  6060
        GAAGAGGGAG ACAGAGATGT GCCAGAGTTG ACCCAGTGTG CGGATGATAA CTACTGACGA  6120
        AAGAGTCATC GACCTCAGTT AGTGGTTGGA TGTAGTCACA TTAGTTTGCC TCTCCCCATC  6180
        TTTGTCTCCC TGGCAAGGAG AATATGCGGG ACATGATGCT AAGAGCCCTG GGTAAATGTG  6240
        GTGAGAATGC ACGCGTGCAT ATGCTACACA TATGTGCTTC TCAGTTGCAG AAAATGAACT  6300
        GCTTTGGGAG ATTATCAGTA GAAAGAGTGT TATCATATTG GTGCTGAGTG CTATGTGTGC  6360
        TTATACAATT TGTTCTTGTA TTTTAATAAA CTTTGAATAA AAGAATAAAA AAAAAAAAAA  6420
        AAAAAAAAA
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Seq ID NO: 600 _Protein sequence_
Protein Accession #: NP_000784.2

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1          11         21         31         41         51
|          |          |          |          |          |
MGILSVDLLI TLQILPVFFS NCLFLALYDS VILLKHVVLL LSRSKSTRGE WRRMLTSEGL   60
RCVWKSFLLD AYKQVKLGED APNSSVVHVS STEGGDNSGN GTQEKIAEGA TCHLLDPASP  120
ERPLVVNFGS ATUPPFTSQL PAFRKLVEEF SSVADFLLVY IDEAHPSDGW AIPGDSSLSF  180
EVKKHQNQED RCAAAQQLLE RFSLPPQCRV VADRMDNNAN IAYGVAFERV CIVQRQKIAY  240
LGGKGPPSYN LQEVRHWLEK NFSKRUKKTR LAG
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Seq ID NO: 601 _DNA sequence_
Nucleic Acid Accession #: NM_005233.1
Coding sequence: 101..3052

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1          11         21         31         41         51
|          |          |          |          |          |
CCATGGATGG TAACTTCTCC AGCAATCAGA GCGCTCCCCC TCACATCAGT GGCATGCTTC   60
ATGGAGATAT GCTCCTCTCA CTGCCCTCTG CACCAGCAAC ATGGATTGTC AGCTCTCCAT  120
CCTCCTCCTT CTCAGCTGCT CTGTTCTCGA CAGCTTCGGG GAACTGATTC CGCAGCCTTC  180
CAATGAAGTC AATCTACTGG ATTCAAAAAC AATTCAAGGG GAGCTGGGCT GGATCTCTTA  240
TCCATCACAT GGGTGGGAAG AGATCAGTGG TGTGGATGAA CATTACACAC CCATCAGGAC  300
TTACCAGGTG TGCAATGTCA TGGACCACAG TCAAAACAAT TGGCTGAGAA CAAACTGGGT  360
CCCCAGGAAC TCAGCTCAGA AGATTTATGT GGAGCTCAAG TTCACTCTAC GAGACTGCAA  420
TAGCATTCCA TTGGTTTTAG GAACTTGCAA GGAGACATTC AACCTGTACT ACATGGAGTC  480
TGATGATGAT CATGGGGTGA AATTTCGAGA GCATCAGTTT ACAAAGATTG ACACCATTGC  540
AGCTGATGAA AGTTTCACTC AAATGGATCT TGGGGACCGT ATTCTGAAGC TCAACACTGA  600
GATTAGAGAA GTAGGTCCTG TCAACAAGAA GGGATTTTTAT TTGGCATTTC AAGATGTTGG  660
TGCTTGTGTT GCCTGGTGTG CTGTGAGAGT ATACTTCAAA AAGTGCCCAT TTACAGTGAA  720
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GAATCTGGCT ATGTTTCCAG ACACGGTACC CATGGACTCC CAGTCCCTGG TGGAGGTTAG   780
AGGGTCTTGT GTCAACAATT CTAAGGAGGA AGATCCTCCA AGGATGTACT GCAGTACAGA   840
AGGCGAATGG CTTGTACCCA TTGGCAAGTG TTCCTGCAAT GCTGGCTATG AAGAAAGAGG   900
TTTTATGTGC CAAGCTTGTC GACCAGGTTT CTACAAGGCA TTGGATGGTA ATATGAAGTG   960
TGCTAAGTGC CCGCCTCACA GTTCTACTCA GGAAGATGGT TCAATGAACT GCAGGTGTGA  1020
GAATAATTAC TTCCGGGCAG ACAAAGACCC TCCATCCATG GCTTGTACCC GACCTCCATC  1080
TTCACCAAGA AATGTTATCT CTAATATAAA CGAGACCTCA GTTATCCTGG ACTGGAGTTG  1140
GCCCCTGGAC ACAGGAGGCC GGAAAGATGT TACCTTCAAC ATCATATGTA AAAAATGTGG  1200
GTGGAATATA AAACAGTGTG AGCCATGCAG CCCAAATGTC CGCTTCCTCC CTCGACAGTT  1260
TGGACTCACC AACACCACGG TGACAGTGAC AGACCTTCTG CGACATACTA ACTACACCTT  1320
TGAGATTGAT GCCGTTAATG GGGTGTCAGA GCTGAGCTCC CCACCAAGAC AGTTTGCTGC  1380
GGTCAGCATC ACAACTAATC AGGCTGCTCC ATCACCTGTC CTGACGATTA AGAAAGATCG  1440
GACCTCCAGA AATAGCATCT CTTTGTCCTG GCAAGAACCT GAACATCCTA ATGGGATCAT  1500
ATTGGACTAC GAGGTCAAAT ACTATGAAAA GCAGGAACAA GAAACAAGTT ATACCATTCT  1560
GAGGGCAAGA GGCACAAATG TTACCATCAG TAGCCTCAAG CCTGACACTA TATACGTATT  1620
CCAAATCCGA GCCCGAACAG CCGCTGGATA TGGGACGAAC AGCCGCAAGT TTGAGTTTGA  1680
AACTAGTCCA GACTCTTTCT CCATCTCTGG TGAAAGTAGC CAAGTGGTCA TGATCGCCAT  1740
TTCAGCGGCA GTAGCAATTA TTCTCCTCAC TGTTGTCATC TATGTTTTGA TTGGGAGGTT  1800
CTGTGGCTAT AAGTCAAAAC ATGGGGCAGA TGAAAAAAGA CTTCATTTTG GCAATGGGCA  1860
TTTAAAACTT CCAGGTCTCA GGACTTATGT TGACCCACAT ACATATGAAG ACCCTACCCA  1920
AGCTGTTCAT GAGTTTGCCA AGGAATTGGA TGCCACCAAC ATATCCATTG ATAAAGTTGT  1980
TGGAGCAGGT GAATTTGGAG AGGTGTGCAG TGGTCGCTTA AAACTTCCTT CAAAAAAAGA  2040
GATTTCAGTG GCCATTAAAA CCCTGAAAGT TGGCTACACA GAAAAGCAGA GGAGAGACTT  2100
CCTGGGAGAA GCAAGCATTA TGGGACAGTT TGACCACCCC AATATCATTC GACTGGAAGG  2160
AGTTGTTACC AAAAGTAAGC CAGTTATGAT TGTCACAGAA TACATGGAGA ATGGTTCCTT  2220
GGATAGTTTC CTACGTAAAC ACGATGCCCA GTTTACTGTC ATTCAGCTAG TGGGGATGCAT  2280
TCGAGGGATA GCATCTGGCA TGAAGTACCT GTCAGACATG GGCTATGTTC ACCGAGACCT  2340
CGCTGCTCGG AACATCTTGA TCAACAGTAA CTTGGTGTGT AAGGTTTCTG ATTTCGGACT  2400
TTCGCGTGTC CTGGAGGATG ACCCAGAAGC TGCTTATACA ACAAGAGGAG GGAAGATCCC  2460
AATCAGGTGG ACATCACCAG AAGCTATAGC CTACCGCAAG TTCACGTCAG CCAGCGATGT  2520
ATGGAGTTAT GGGATTGTTC TCTGGGAGGT GATGTCTTAT GGAGAGAGAC CATACTGGGA  2580
GATGTCCAAT CAGGATGTAA TTAAAGCTGT AGATGAGGGC TATCGACTGC CACCCCCCAT  2640
GGACTGCCCA GCTGCCTTGT ATCAGCTGAT GCTGGACTGC TGGCAGAAAG ACAGGAACAA  2700
CAGACCCAAG TTTGAGCAGA TTGTTAGTAT TCTGGACAAG CTTATCCGGA ATCCCGGCAG  2760
CCTGAAGATC ATCACCAGTG CAGCCGCAAG GCCATCAAAC CTTCTTCTGG ACCAAAGCAA  2820
TGTGGATATC TCTACCTTCC GCACAACAGG TGACTGGCTT AATGGTGTCC GGACAGCACA  2880
CTGCAAGGAA ATCTTCACGG GCGTGGAGTA CAGTTCTTGT GACACAATAG CCAAGATTTC  2940
CACAGATGAC ATGAAAAAGG TTGGTGTCAC CGTGGTTGGG CCACAGAAGA AGATCATCAG  3000
TAGCATTAAA GCTCTAGAAA CGCAATCAAA GAATGGCCCA GTTCCCGTGT AAAGCACGAC  3060
GGAAGTGCTT CTGGACGGAA GTGGTGGCTG TGGAAGGCGT CAAGTCATCC TGCAGACAGA  3120
CAATAATTCT GGAGATACTG GTGGAAGTT
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Seq ID NO: 602 Protein sequence
Protein Accession #: NP_005224.1

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1          11         21         31         41         51
|          |          |          |          |          |
MDCQLSILLL LSCSVLDSFG ELIPQPSNEV NLLDSKTIQG ELGWISYPSH GWEEISGVDE   60
HYTPIRTYQV CNVMDHSQNN WLRTNWVPRN SAQKIYVELK FTLRDCNSIP LVLGTCKETF  120
NLYYMESDDD HGVKFREHQF TKIDTIAADE SFTQMDLGDR ILKLNTEIRE VGPVNKKGPY  180
LAFQDVGACV ALVSVRVYFK KCPFTVKNLA MFPDTVPMDS QSLVEVRGSC VNNSKEEDPP  240
RMYCSTEGEW LVPIGKCSCN AGYEERGFMC QACRPGFYKA LDGNMKCAKC PPHSSTQEDG  300
SMNCRCENNY FRADKDPPSM ACTRPPSSPR NVISNINETS VILDWSWPLD TGGRKDVTFN  360
IICKKCGWNI KQCEPCSPNV RFLPRQFGLT NTTVTVTDLL AHTNYTFEID AVNGVSELSS  420
PPRQPFAAVSI TTNQAAPSPV LTIKKDRTSR NSISLSWQEP EHPNGIILDY EVKYYEKQEQ  480
ETSYTILRAR GTNVTISSLK PDTIYVFQIR ARTAAGYGTN SRKFEFETSP DSPSISGESS  540
QVVMIAISAA VAIILLTVVI YVLIGRFCGY KSKHGADEKR LHFGNGHLKL PGLRTYVDPH  600
TYEDPTQAVH EFAKELDATN ISIDKVVGAG EFGEVCSGRL KLPSKKEISV AIKTLKVGYT  660
EKQRRDFLGE ASIMGQFDHP NIIRLEGVVT KSKPVMIVTE YMENGSLDSF LRKHDAQFTV  720
IQLVGMLRGI ASGMKYLSDM GYVHRDLAAR NILINSNLVC KVSDFGLSRV LEDDPEAAYT  780
TRGGKIPIRW TSPEAIAYRK FTSASDVWSY GIVLWEVMSY GERPYWEMSN QDVIKAVDEG  840
YRLPPPMDCP AALYQLMLDC WQKDRNNRPK FEQIVSILDK LIRNPGSLKI ITSAAARPSN  900
LLLDQSNVDI STFRTTGDWL NGVRTAHCKE IFTGVEYSSC DTIAKISTDD MKKVGVTVVG  960
PQKKIISSIK ALETQSKNGP VPV
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Seq ID NO: 603 DNA sequence
Nucleic Acid Accession #: NM_005727.1
Coding sequence: 122..847

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1          11         21         31         41         51
|          |          |          |          |          |
GCCAGGCGTC CCTCTGCCTG CCCACTCAGT GGCAACACCC GGGAGCTGTT TTGTCCTTTG   60
TGGAGCCTCA GCAGTTCCCT CTTTCAGAAC TCACTGCCAA CAGGAGCCAC           120
CATGCAGTGC TTCAGCTTCA TTAAGACCAT GATGATCCTC TTCAATTTGC TCATCTTTCT  180
GTGTGGTGCA GCCCTGTTGG CAGTGGGCAT CTGGGTGTCA ATCGATGGGG CATCCTTTCT  240
GAAGATCTTC GGGCCACTGT CGTCCAGTGC CATGCAGTTT GTCAACGTGG GCTACTTCCT  300
CATCGCAGCC GGCGTTGTGG TCTTTGCTCT TGGTTTCCTG GGCTGCTATG TGCTAAGAC   360
TGAGAGCAAG TGTGCCCTCG TGACGTTCTT CTTCATCCTC CTCCTCATCT TCATTGCTGA  420
GGTGCAGCT GCTGTGGTCG CCTTGGTGTA CACCACAATG GCTGAGCACT TCCTGACGTT  480
GCTGGTAGTG CCTGCCATCA AGAAAGATTA TGGTTCCCAG GAAGACTTCA CTCAAGTGTG  540
GAACACCACC ATGAAAGGGC TCAAGTGCTG TGGCTTCACC AACTATACGG ATTTTGAGGA  600
CTCACCCTAC TTCAAAGAACA ACAGTGCCTT TCCCCCATTC TGTTGCAATG ACAACGTCAC  660
CAACACAGCC AATGAAACCT GCACCAAGCA AAAGGCTCAC GACCAAAAAG TAGAGGGTTG  720
CTTCAATCAG CTTTTGTATG ACATCCGAAC TAATGCAGTC ACCGTGGGTG GTGTGGCAGC  780
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TGGAATTGGG GGCCTCGAGC TGGCTGCCAT GATTGTGTCC ATGTATCTGT ACTGCAATCT   840
ACAATAAGTC CACTTCTGCC TCTGCCACTA CTGCTGCCAC ATGGGAACTG TGAAGAGGCA   900
CCCTGGCAAG CAGCAGTGAT TGGGGGAGGG GACAGGGATCT AACAATGTCA CTTGGGCCAG  960
AATGGACCTG CCCTTTCTGC TCCAGACTTG GGGCTAGATA GGGACCACTC CTTTTAGGCG   1020
ATGCCTGACT TTCCTTCCAT TGGTGGGTGG ATGGGTGGGG GGCATTCCAG AGCCTCTAAG   1080
GTAGCCAGTT CTGTTGCCCA TTCCCCCAGT CTATTAAACC CTTGATATGC CCCCTAGGCC   1140
TAGTGGTGAT CCCAGTGCTC TACTGGGGGA TGAGAGAAAG GCATTTTATA GCCTGGGCAT   1200
AAGTGAAATC AGCAGAGCCT CTGGGTGGAT GTGTAGAAGG CACTTCAAAA TGCATAAACC   1260
TGTTACAATG TTAAAAAA
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Seq ID NO: 604 <u>Protein sequence</u>
Protein Accession #: NP_005718.1

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1          11         21         31         41         51
|          |          |          |          |          |
MQCFSPIKTM MILFNLLIFL CGAALLAVGI WVSIDGASFL KIFGPLSSSA MQFVNVGYFL   60
IAAGVVVFAL GFLGCYGAKT ESKCALVTFF FILLLIPIAE VAAAVVALVY TTMAEHFLTL  120
LVVPAIKKDY GSQEDFTQVW NTTMKGLKCC GFTNYTDFED SPYFKENSAF PPPCCNDNVT  180
NTANETCTEQ KAHDQKVEGC FNQLLYDIRT NAVTVGGVAA GIGGLELAAM IVSMYLYCNL  240
Q
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Seq ID NO: 605 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_000729.2
Coding sequence:

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1          11         21         31         41         51
|          |          |          |          |          |
GGCTCAGCTG CCGGGCTGCT CCGGTTGGAA ACGCCAAGCC AGCTGCCGTC CTAATCCAAA   60
AGCCATGAAC AGCGGCGTGT GCCTGTGCGT GCTGATGGCG GTACTGGCGG CTGGCGCCCT  120
GACGCAGCCG GTGCCTCCCG CAGATCCCGC GGGCTCCGGG CTGCAGCGGG CAGAGGAGGC  180
GCCCCGTAGG CAGCTGAGGG TATCGCAGAG AACGGATGGC GAGTCCCGAG CGCACCTGGG  240
CGCCCTGCTG GCAAGATACA TCCAGCAGGC CCGGAAAGCT CCTTCTGGAC GAATGTCCAT  300
CGTTAAGAAC CTGCAGAACC TGGACCCCAG CCACAGGATA AGTGACCGGG ACTACATGGG  360
CTGGATGGAT TTTGGCCGTC GCAGTGCCGA GGAGTATGAG TACCCCTCCT AGAGGACCCA  420
GCCGCCATCA GCCCAACGGA AGCAACCTCC CAACCCAGAG GAGGCAGAAT AAGACAACAA  480
TCACACTCAT AACTCATTGT CTGTGGAGTT TGACATTGAA TGTATCTATT TATTAAGTTC  540
TCAATGTGAA AATTGTGTCT GTAAGATTGT CCAGTGCAAC CACACACGCT CACCAGAAGT  600
TGTGCAAACT GAAGACAAAA CTGTTTTCTT CATCTGTGAC TCCTGTTCTG AAAAATGTTGT  660
TATGCTATTA AAGTGATTTC ATTCTGCC
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Seq ID NO: 606 <u>Protein sequence</u>
Protein Accession #: NP_000720.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MNSGVCLCVL MAVLAAGALT QPVPPADPAG SGLQRAEEAP RRQLRVSQRT DGESRAHLGA   60
LLARYIQQAR KAPSGRMSIV KNLQNLDPSH RISDRDYMGW MDFGRRSAEE YEYPS
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Seq ID NO: 607 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_001423.1
Coding sequence: 219..692

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1          11         21         31         41         51
|          |          |          |          |          |
AGCACTCTCC AGCCTCTCAC CGCAAAATTA CACACCCCAG TACACCAGCA GAGGAAACTT   60
ATAACCTCGG GAGGCGGGTC CTTCCCCTCA GTGCGGTCAC ATACTTCCAG AAGAGCGGAC  120
CAGGGCTGCT GCCAAGCACCT GCCACTCAGA GCGCCTCTGT CGCTGGGACC CTTCAGAACT  180
CTCTTTGCTC ACAAGTTACC AAAAAAAAAA GAGCCAACAT GTTGGTATTG CTGGCTGGTA  240
TCTTTGTGGT CCACATCGCT ACTGTTATTA TGCTATTTGT TAGCACCATT GCCAATGTCT  300
GGTTGGTTTC CAATACGGTA GATGCATCAG TAGGTCTTTG GAAAAACTGT ACCAACATTA  360
GCTGCAGTGA CAGCCTGTCA TATGCCAGTG AAGATGCCCT CAAGACAGTG CAGGCCTTCA  420
TGATTCTCTC TATCATCTTC TGTGTCATTG CCCTCCTGGT CTTCGTGTTC CAGCTCTTCA  480
CCATGGAGAA GGGAAACCGG TTCTTCCTCT CAGGGGCCAC CACACTGGTG TGCTGGCTGT  540
GCATTCTTGT GGGGGTGTCC ATCTACACTA GTCATTATGC GAATCGTGAT GGAACGCAGT  600
ATCACCACGG CTATTCCTAC ATCCTGGGCT GGATCTGCTT CTGCTTCAGC TTCATCATCG  660
GCGTTCTCTA TCTGGTCCTG AGAAAGAAAT AAGGCCGGAC GAGTTCATGG GGATCTGGGG  720
GGTGGGGAGG AGGAAGCCGT TGAATCTGGG AGGGAAGTGG AGGTTGCTGT ACAGGAAAAA  780
CCGAGATAGG GGAGGGGGGA GGGGGAAGCA AAGGGGGGAG GTCAAATCCC AAACCATTAC  840
TGAGGGGATT CTCTACTGCC AAGCCCCTGC CCTGGGGAGA AAGTAGTTGG CTAGTACTTT  900
GATGCTCCCT TGATGGGGTC CAGAGAGCCT CCCTGCAGCC ACCAGACTTG GCCTCCAGCT  960
GTTCTTAGTG ACACACACTG TCTGGGGCCC CATCAGCTGC CACAACACCA GCCCCACTTC  1020
TGGGTCATGC ACTGAGGTCC ACAGACCTAC TGCACTGAGT TAAAATAGCG GTACAAGTTC  1080
TGGCAAGAGC AGATACTGTC TTTGTGCTGA ATACGCTAAG CCTGGAAGCC ATCCTGCCCT  1140
TCTGACCCAA AGCAAAACAT CACATTCCAG TCTGAAGTGC CTACTGGGGG GCTTTGGCCT  1200
GTGAGCCATT GTCCCTCTTT GGAACAGATA TTTAGCTCTG TGGAATTCAG TGACAAAATG  1260
GGAGGAGGAA AGAGAGTTTG TAAGGTCATG CTGGTGGGTT AGCTAAACCA AGAAGGAGAC  1320
CTTTTCACAA TGGAAACCT GGGGGATGGT CAGAGCCCAG TCGAGACCTC ACACACGGCT  1380
GTCCCTCATG GAGACCTCAT GCCATGGTCT TTGCTAGGCC TCTTGCTGAA AGCCAAGGCA  1440
GCTCTTCTGG AGTTTCTCTA AAGTCACTAG TGAACAATTC GGTGGTAAAA GTACCACACA  1500
AACTATGGGA TCCAAGGGGC AGTCTTGCAA CAGTGCCATG TTAGGGTTAT GTTTTTAGGA  1560
TTCCCCTCAA TGCAGTCAGT GTTTCTTTTA AGTATACAAC AGGAGAGAGA TGGACATGGC  1620
TCATTGTAGC ACAATCCTAT TACTCTTCCT CTAACATTTT TGAGGAAGTT TTGTCTAATT  1680
ATCAATATTG AGGATCAGGG CTCCTAGGCT CAGTGGTAGC TCTGGCTTAG ACACCACCTG  1740
GAGTGATCAC CTCTTGGGGA CCCTGCCTAT CCCACTTCAC AGGTGAGGCA TGGCAATTCT  1800
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         GGAAGCTGAT TAAAACACAC ATAAACCAAA ACCAAACAAC AGGCCCTTGG GTGAAAGGTG  1860
       . CTATATAATT GTGAAGTATT AAGCCTACCG TATTTCAGCC ATGATAAGAA CAGAGTGCCT  1920
         GCATTCCCAG GAAAATACGA AAATCCCATG AGATAAAATAA AAATATAGGT GATGGGCAGA  1980
         TCTTTTCTTT AAAATAAAAA AGCAAAAACT CTTGTGGTAC CTAGTCAGAT GGTAGACGAG  2040
5        CTGTCTGCTG CCGCAGGAGC ACCTCTATAC AGGACTTAGA AGTAGTATGT TATTCCTGGT  2100
         TAAGCAGGCA TTGCTTTGCC CTGGAGCAGC TATTTTAAGC CATCTCAGAT TCTGTCTAAA  2160
         GGGGTTTTTT GGGAAGACGT TTTCTTTATC GCCCTGAGAA GATCTACCCC AGGGAGAATC  2220
         TGAGACATCT TGCCTACTTT TCTTTATTAG CTTTCTCCTC ATCCATTTCT TTTATACCTT  2280
         TCCTTTTTGG GGAGTTGTTA TGCCATGATT TTTGGTATTT ATGTAAAAGG ATTATTACTA  2340
10       ATTCTATTTC TCTATGTTTA TTCTAGTTAA GGAAATGTTG AGGGCAAGCC ACCAAATTAC  2400
         CTAGGCTGAG GTTAGAGAGA TTGGCCAGCA AAAACTGTGG GAAGATGAAC TTTGTCATTA  2460
         TGATTTCATT ATCACATGAT TATAGAAGGC TGTCTTAGTG CAAAAAACAT ACTTACATTT  2520
         CAGACATATC CAAAGGGAAT ACTCACATTT TGTTAAGAAG TTGAACTATG ACTGGAGTAA  2580
15       ACCATGTATT CCCTTATCTT TTACTTTTTT TCTGTGACAT TTATGTCTCA TGTAATTTGC  2640
         ATTACTCTGG TGGATTGTTC TAGTACTGTA TTGGGCTTCT TCGTTAATAG ATTATTTCAT  2700
         ATACTATAAT TGTAAATATT TTGATACAAA TGTTTATAAC TCTAGGGATA TAAAAACAGA  2760
         TTCTGATTCC CTTCAAAAAA AAAAAA  .
```

Seq ID NO: 608 <u>Protein sequence</u>
20 Protein Accession #: NP_001414.1

```
     1         11         21         31         41         51
     |          |          |          |          |          |
25   MLVLLAGIFV VHIATVIMLF VSTIANVWLV SNTVDASVGL WKNCTNISCS DSLSYASEDA   60
     LKTVQAFMIL SIIFCVIALL VFVFQLFTME KGNRFFLSGA TTLVCWLCIL VGVSIYTSHY  120
     ANRDGTQYHH GYSYILGWIC FCFSFIIGVL YLVLRKK
```

Seq ID NO: 609 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_004961.2
30 Coding sequence: 55..1575

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     1         11         21         31         41         51
     |          |          |          |          |          |
     GCCAGAGCGT GAGCCGCGAC CTCCGCGCAG GTGGTCGCGC CGGTCTCCGC GGAAATGTTG   60
35   TCCAAGTTC TTCCAGTCCT CCTAGGCATC TTATTGATCC TCCAGTCGAG GGTCGAGGGA  120
     CCTCAGACTG AATCAAAGAA TGAAGCCTCT TCCCGTGATG TTGTCTATGG CCCCCAGCCC  180
     CAGCCTCTGG AAAATCAGCT CCTCTCTGAG GAAACAAAGT CAACTGAGAC TGAGACTGGG  240
     AGCAGAGTTG GCAAACTGCC AGAAGCCTCT CGCATCCTGA ACACTATCCT GAGTAAATTAT  300
40   GACCACAAAC TGCGCCCTGG CATTGGGAGA AAGCCCACTG TGGTCACTGT TGAGATCGCC  360
     GTCAACAGCC TTGGTCCTCT CTCTATCCTA GACATGGAAT ACACCATTGA CATCATCTTC  420
     TCCCAGACCT GGTACGACGA ACGCCTCTGT TACAACGACA CCTTTGAGTC TCTTGTTCTG  480
     AATGGCAATG TGGTGAGCCA GCTATGGATC CCGGACACCT TTTTTAGGAA TTCTAAGAGG  540
     ACCCACGAGC ATGAGATCAC CATGCCCAAC CAGATGGTCC GCATCTACAA GGATGGCAAG  600
45   GTGTTGTACA CAATTAGGAT GACCATTGAT GCCGGATGCT CACTCCACAT GCTCAGATTT  660
     CCAATGGATT CTCACTCTTG CCCTCTATCT TTCTCTAGCT TTTCCTATCC TGAGAATGAG  720
     ATGATCTACA AGTGGGAAAA TTTCAAGCTT GAAATCAATG AGAAGAACTC CTGGAAGCTC  780
     TTCCAGTTTG ATTTTACAGG AGTGAGCAAC AAAAACTGAAA TAATCACAAC CCCAGTTGGT  840
     GACTTCATGG TCATGACGAT TTTCTTCAAT GTGAGCAGGC GGTTTGGCTA TGTTGCCTTT  900
50   CAAAACTATG TCCCTTCTTC CGTGACCACG ATGCTCTCCT GGGTTTCCTT TTGGATCAAG  960
     ACAGAGTCTG CTCCAGCCCG GACCTCTCTA GGGATCACCT CTGTTCTGAC CATGACCACG  1020
     TTGGGCACCT TTTCTCGTAA GAATTTCCCG CGTGTCTCCT ATATCACAGC CTTGGATTTC  1080
     TATATCGCCA TCTGCTTCGT CTTCTCGCTTC TGCGCTCTGT TGGAGTTTGC TGTGTCTCAAC  1140
     TTCCTGATCT ACAACCGAGAC AAAAGCCCAT GCTTCTCCTA AACTCCGCCA TCCTCGTATC  1200
55   AATAGCCGTG CCCATGCCCA TACCCGTGCA CGTTCCCGAG CCTGTGCCCG CCAACATCAG  1260
     GAAGCTTTTG TGTGCCAGAT TGTCACCACT GAGGGAAGTG ATGGAGAGGA GCGCCGTCT  1320
     TGCTCAGCCC AGCAGCCCCC TAGCCCAGGT AGCCCTGAGG GTCCCCGCAG CCTCTGCTCC  1380
     AAGCTGGCCT GCTGTGAGTG GTGCAAGCGT TTTAAGAAGT ACTTCTGCAT GGTCCCCGAT .  1440
     TGTGAGGGCA GTACCTGGCA GCAGGGCCGC CTCTGCATCC ATGTCTACCG CCTGGATAAC  1500
60   TACTCGAGAG TTGTTTTCCC AGTGACTTTC TTCTTCTTCA ATGTGCTCTA CTGGCTTGTT  1560
     TGCCTTAACT TGTAGGTACC AGCTGGTACC CTGTGGGGCA ACCTCTCCAG TTCCCCAGGTT  1620
     GGTCCAAGCC CCTTGCCAAG GGAGTTGGGG GAAAGCAGCA GCAGCAGCAG GAGCGACTAG  1680
     AGTTTTTCCT GCCCCATTCC CCAAACAGAA GCTTGCAGAG GGTTTGTCTT TGCTGCCCCT  1740
     CTCCCCTACC TGGCCCATTC ACTGAGTCTT CTCAGCAGAC CATTTCAAAT TATTAATAAA  1800
65   TGGGCCACCT CCCTCTTCTT CAAGGACGAT CCGTGATGCT CAGTGTTCAA AACCACAGCC  1860
     ACTTAGTGAT CAGCTCCCTA AAACCATGCC TAAGTACAGG CGGATTAGCT ATCTTCCAAC  1920
     AATGCTGACC ACCAGACAAT TACTGCATTT TTCCAGAAGC CCACTATTGC CTTTGTAGTG  1980
     CTTTCGGCCC AGTTCTGGCC TCAGCCTCAA AGTGCACCGA CTAGTTGCTT GCCTATACCT  2040
     GGCACCTCAT TAAGATGCTG GGCAGCAGTA TAACAGGAGG AAGAGATCCC TCTCCTTTGG  2100
70   TCAGATTATT ATGTTCTCAG TTCTCTCTCC CTGCTACCCC TTTCTCTGCA GATAGATAGA  2160
     CACTGACTCA ATCCCTTTAG GAAGAGGGGG GGGCAGCAAG AGAGCCTATT TGGGACAGCA  2220
     TTCCTCTCTC TCTGCTGCTG TGACATCTCC CTCTCCTTGC TGGCTCCATC TTTCGTCTGC  2280
     ACTACCAATT CAATGCCCTT CATCCAATGG GTATCTATTT TTGTGTGTGA TTATAGTAAC  2340
     TACTCCCTGC TTTATATGCC ACCCTCTTCC TTCTCTTTGA CCCCTGCTGAC TCTTTCTGTA  2400
75   ACTTTCCCAG TGACTTCCCC TAGCCCTGAC CCAGGCACTA GGCCTTGGTG ACTTCCTGGG  2460
     GCCAAGAAAC TAAGGAAACT CGGCTTTGCA ACAGGCATTA CTCGCCATTG ATTGGTGCCC  2520
     ACCCAGGGCA CACTGTCGGA GTTCTATCAC TTGCTTGACC CCTGGACCCA TAAACCAGTC  2580
     CACTGTTATA CCCGGGGCAC TCTAACCATC ACAATCAATC AATCAAATTC CCTTAAATTT  2640
     GTATGGCACT GGAACTTTGG CAAAGCACTT TTGACAAGTT GTGTCTGATT GGAGCTTCAT  2700
80   GATAGCCTTG TGACATCTTT AGGGCAGGAT TCTTATCCCC ATTTTGCAGA TGAAAACCCT  2760
     GAGTCACAGA TTTCTGTGGG ACTGTGGATC TCACTGGAAG CTATCCAAGA GCCCACTGTC  2820
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         IFSQTWYDER LCYNDTFESL VLNGNVVSQL WIPDTFFRNS KRTHEHEITM PNQMVRIYKD   180
         GKVLYTIRMT IDAGCSLHML RFPMDSHSCP LSFSSFSYPE NEMIYKWENF KLEINEKNSW   240
         KLFQFDFTGV SNKTEIITTP VGDFMVMTIF FNVSRRFGYV AFQNYVPSSV TTMLSNVSFW   300
 15      IKTESAPART SLGITSVLTM TTLGTFSRKN FPRVSYITAL DFYIAICFVF CFCALLEFAV   360
         LNFLIYNQTK AHASPKLRHP RINSRAHART RARSRACARQ HQEAFVCQIV TTEGSDGEER   420
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INEKNSWKLF QLDPTGVSNK TEIITTPVGD FMVMTIFFNV SRRFGYVAFQ NYVPSSVTTM  180
LSWVSFWIKT ESAPARTSLG ITSVLTMTTL GTFSRKNFPR VSYITALDFY IAICFVFCFC  240
ALLEFAVLNF LIYNQTKAHA SPKLRHPRIN SRAHARTRAR SRACARQHQE AFVCQIVTTE  300
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Seq ID NO: 613 <u>DNA sequence</u>
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Coding sequence: 572..1657

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GTGTAAAGAA AGCCAAATCA AGGACCCGAA TGTGAGCAGG ACCTCAGAAG CCCCCTTTGT  240
CACTGCCTCC CAGCAAAGGC AGCACTATCC GGACTTCTAA CACCATCGGG TCGAGGGACC  300
TCAGACTGAA TCAAAGAATG AAGCCTCTTC CCGTGATGTT GTCTATGGCC CCCAGCCCCA  360
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Seq ID NO: 614 <u>Protein sequence</u>
Protein Accession #: NP_068822.1

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FSRKNFPRVS YITALDFYIA ICFVFCFCAL LEFAVLNFLI YNQTKAHASP KLRHPRINSR  240
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Seq ID NO: 615 <u>DNA sequence</u>
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Protein Accession #: NP_068830.1

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Seq ID NO: 617 <u>DNA sequence</u>
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GGGGCTCCCC GAGGCCTCCC GCCTTCACCG GGCTCTGTTC CGGCTGTCCC CGACGGCGTC   420
AAGGTCGTGG GACGTGACAC GACCGCTGCG GCGTCAGCTC AGCCTTGCAA GACCCCAAGC   480
GCCCGCGCTG CACCTGCGAC TGTCGCCGCG GCCGTCGCAG TCGGACCAAC TGCTGGCAGA   540
ATCTTCGTCC GCACGGCCCC AGCTGGAGTT GCACTTGCGG CCGCAAGCCG CCAGGGGGCG   600
CCGCAGAGCG CGTGCGCGCA ACGGGGACGA CTGTCCGCTC GGGCCCGGGC GTTGCTGCCG   660
TCTGCACACG GTCCGCGCGT CGCTGGAAGA CCTGGGCTGG GCCGATTGGG TGCTGTCGCC   720
ACGGGAGGTG CAAGTGACCA TGTGCATCGG CGCGTGCCCG AGCCAGTTCC GGGCGGCAAA   780
CATGCACGCG CAGATCAAGA CGAGCCTGCA CCGGCTGAAG CCCGACACGG AGCCAGCGCC   840
CTGCTGCGTG CCCGCCAGCT ACAATCCCAT GGTGCTCATT CAAAAGACCG ACACCGGGGT   900
GTCGCTCCAG ACCTATGATG ACTTGTTAGC CAAAGACTGC CACTGCATAT GAGCAGTCCT   960
GGTCCTTCCA CTGTGCACCT GCGCGGGGGA GGCGACCTCA GTTGTCCTGC CCTGTGGAAT  1020
GGGCTCAAGG TTCCTGAGAC ACCCGATTCC TGCCCAAACA GCTGTGTATTTA TATAAGTCTG  1080
TTATTTATTA TTAATTTATT GGGGTGACCT TCTTGGGGAC TCGGGGGCTG GTCTGATGGA  1140
ACTGTGTATT TATTTAAAAC TCTGGTGATA AAAATAAAGC TGTCTGAACT GTTAAAAAAA  1200
AAAA
```

Seq ID NO: 618 <u>Protein sequence</u>
Protein Accession #: NP_004855.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MPGQELRTVN GSQMLLVLLV LSWLPHGGAL SLAEASRASF PGPSELHSED SRFRELRKRY    60
EDLLTRLRAN QSWEDSNTDL VPAPAVRILT PEVRLGSGGH LHLRISRAAL PEGLPEASRL   120
HRALFRLSPT ASRSWDVTRP LRRQLSLARP QAPALHLRLS PPPSQSDQLL AESSSSARPQL   180
ELHLRPQAAR GRRRARARNG DDCPLGPGRC CRLHTVRASL EDLGWADWVL SPREVQVTMC   240
IGACPSQFRA ANMHAQIKTS LHRLKPDTEP APCCVPASYN PMVLIQKTDT GVSLQTYDDL   300
LAKDCHCI
```

Seq ID NO: 619 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_003979.2
Coding sequence: 254..1357

```
1          11         21         31         41         51
|          |          |          |          |          |
ATAACAGCAT GAAGTGCCGT GGAACTGGAA TAGGCGTGTC CTCTCCCTCG ACCCTCCCCC    60
TCCTTGTCCC TCTGCTCACC CCTCGCTCGT TCCCTCCCTC CGGCGAGGGC CGCCTTTATA   120
ACAACTGCTC AGAGTGCGAG GGCGGGATAG CTGTCCAAGG TCTCCCCCAG CACTGAGGAG   180
CTCGCCTGCT GCCCTCTTGC GCGCGGGAAG CAGCACCAAG TTCACGGCCA ACGCCTTGGC   240
ACTAGGGTCC AGAATGGCTA CAACAGTCCC TGATGGTTGC CGCAATGGCC TGAAATCCAA   300
GTACTACAGA CTTTGTGATA AGGCTGAAGC TTGGGGCATC GTCCTAGAAA CGGTGGCCAC   360
AGCCGGGGTT GTGACCTCGG TGGCCTTCAT GCTCACTCTC CCGATCCTCG TCTGCAAGGT   420
GCAGGACTCC AACAGGCGAA AAATGCTGCC TACTCAGTTT CTCTTCCTCC TGGGTGTGTT   480
GGGCATCTTT GGCCTCACCT TCGCCTTCAT CATCGGACTG GACGGGAGCA CAGGGCCCAC   540
ACGCTTCTTC CTCTTTGGGA TCCTCTTTTC CATCTGCTTC TCCTGCCTGC TGGCTCATGC   600
TGTCAGTCTG ACCAAGCTGC TCCGGGGGAG GAAGCCCCTT TCCCTGTTGG TGATTCTGGG   660
TCTGGCCGTG GGCTTCAGCC TAGTCCAGGA TGTTATCGCT ATTGAATATA TTGTCCTGAC   720
CATGAATAGG ACCAACGTCA ATGTCTTTTC TGAGCTTTCC GCTCCTCGTC GCAATGAAGA   780
CTTTGTCCTC CTGCTCACCT ACGTCCTCTT CTTGATGGCG CTGACCTTCC TCATGTCCTC   840
CTTCACCTTC TGTGGTTCCT TCACGGGCTG GAAGAGACAT GGGGCCCACA TCTACCTCAC   900
GATGCTCCTC TCCATTGCCA TCTGGGTGGC CTGGATCACC CTGCTCATGC TTCCTGACTT   960
TGACCGCAGG TGGGATGACA CCATCCTCAG CTCCGCCTTG CTGCCCAATG GCTGGGTGTT  1020
CCTGTTGGCT TATGTTAGTC CCGAGTTTTG GCTGCTCACA AAGCAACGAA ACCCCATGGA  1080
TTATCCTGTT GAGGATGCTT TCTGTAAACC TCAACTCGTG AAGAAGAGCT ATGGTGTGGA  1140
GAACAGAGCC TACTCTCAAG AGGAAATCAC TCAAGGTTTT GAAGAGACAG GGGACACGCT  1200
CTATGCCCCC TATTCCACAC ATTTTCAGCT GCAGAACCAG CCTCCCCAAA AGGAATTCTC  1260
CATCCCACGG GCCCACGCTT GGCCGAGCCC TTACAAAGAC TATGAAGTAA AGAAAGAGGG  1320
CAGCTAACTC TGTCCTGAAG AGTGGGACAA ATGCAGCCGG GCGGCAGATC TAGCGGGAGC  1380
TCAAAGGGAT GTGGGCGAAA TCTTGAGTCT TCTGAGAAAA CTGTACAAGA CACTACGGGA  1440
ACAGTTTGCC TCCCTCCCAG CCTCAACCAC AATTCTTCCA TGCTGGGGGCT GATGTGGGCT  1500
AGTAAGACTC CAGTTCTTAG AGGCGCTGTA GTATTTTTTT TTTTTGTCT CATCCTTTGG  1560
ATACTTCTTT TAAGTGGGAG TCTCAGGCAA CTCAAGTTTA GACCCTTACT CTTTTTGTTT  1620
GTTTTTTGAA ACAGGATCTT GCTCTGTCAC CCAGGCTTGA GTGCAGTGGT GCGATCACAG  1680
CCCAGTTGCAG CCTCGACCAC CTGTGCTCAA GCAATCCTCC CATCTCCATC TCCCAAAGTG  1740
CTGGGATGAC AGGCGTGAGC CACAGCTCCC AGCCTAGGCG CTTAATCTTG CTGTTATTTT  1800
CCATGGACTA AAGGTCTGGT CATCTGAGCT CACGCTGGCT CACACAGCTC TAGGGGCCTG  1860
CTCCTCTAAC TCACAGTGGG TTTTGTGAGG CTCTGTGGCC CAGAGCAGAC CTGCATATCT  1920
GAGCAAAAAT AGCAAAAGCC TCTCTCAGCC CACTGGCCTG AATCTACACT GGAAGCCAAC  1980
TTGCTGGCAC CCCCGCTCCC CAACCCTTCT TGCCTGGGTA GGAGAGGCTA AAGATCACCC  2040
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            TAAATTTACT CATCTCTCTA GTGCTGCCTC ACATTGGGCC TCAGCAGCTC CCCAGCACCA   2100
            ATTCACAGGT CACCCCTCTC TTCTTGCACT GTCCCCAAAC TTGCTGTCAA TTCCGAGATC   2160
            TAATCTCCCC CTACGCTCTG CCAGGAATTC TTTCAGACCT CACTAGCACA AGCCCGGTTG   2220
            CTCCTTGTCA GGAGAATTTG TAGATCATTC TCACTTCAAA TTCCTGGGGC TGATACTTCT   2280
            CTCATCTTGC ACCCCAACCT CTGTAAATAG ATTTACCGCA TTTACGGCTG CATTCTGTAA   2340
            GTGGGCATGG TCTCCTAATG GAGGAGTGTT CATTGTATAA TAAGTTATTC ACCTGAGTAT   2400
            GCAATAAAGA TGTGGTGGCC ACTCTTTCAT GGTGGTGGCA GCAAAAAAAA AAAAAA
```

Seq ID NO: 620 Protein sequence
Protein Accession #: NP_003970.1

```
            1          11         21         31         41         51
            |          |          |          |          |          |
            MATTVPDGCR NGLKSKYYRL CDKAEAWGIV LETVATAGVV TSVAFMLTLP ILVCKVQDSN   60
            RRKMLPTQFL FLLGVLGIFG LTFAPIIGLD GSTGPTRFFL FGILFSICFS CLLAHAVSLT   120
            KLVRGRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTMNRT NVNVFSELSA PRRNEDFVLL   180
            LTYVLFLMAL TFIMSSFTFC GSFTGWKRHG AHIYLTMLLS IAIWVAWITL LMLPDFDRRW   240
            DDTILSSALA ANGWVFLLAY VSPEFWLLTK QRNPMDYPVE DAFCKPQLVK KSYGVENRAY   300
            SQEEITQGFE ETGDTLYAPY STHFQLQNQP PQKEFSIPRA HAWPSPYKDY EVKKEGS
```

Seq ID NO: 621 DNA sequence
Nucleic Acid Accession #: NM_002423.2
Coding sequence: 48..851

```
            1          11         21         31         41         51
            |          |          |          |          |          |
            ACCAAATCAA CCATAGGTCC AAGAACAATT GTCTCTGGAC GGCAGCTATG CGACTCACCG   60
            TGCTGTGTGC TGTGTGCCTG CTGCCTGGCA GCCTGGCCCT GCCGCTGCCT CAGGAGGCGG   120
            GAGGCATGAG TGAGCTACAG TGGGAACAGG CTCAGGACTA TCTCAAGAGA TTTTATCTCT   180
            ATGACTCAGA AACAAAAAAT GCCAACAGTT TAGAAGCCAA ACTCAAGGAG ATGCAAAAAT   240
            TCTTTGGCCT ACCTATAACT GGAATGTTAA ACTCCCGCGT CATAGAAATA ATGCAGAAGC   300
            CCAGATGTGG AGTGCCAGAT GTTGCAGAAT ACTCACTATT TCCAAATAGC CCAAAATGGA   360
            CTTCCAAAGT GGTCACCTAC AGGATCGTAT CATATACTCG AGACTTACCG CATATTACAG   420
            TGGATCGATT AGTGTCAAAG GCTTTAAACA TGTGGGGCAA AGAGATCCCC CTGCATTTCA   480
            GGAAAGTTGT ATGGGGAACT GCTGACATCA TGATTGGCTT TGCGCGAGGA GCTCATGGGG   540
            ACTCCTACCG ATTTGATGGG CCAGGAAACA CGCTGGCTCA TGCCTTTGCG CCTGGGACAG   600
            GTCTCGGAGG AGATGCTCAC TTCGATGAGG ATGAACGCTG GACGGATGGT AGCAGTCTAG   660
            GGATTAACTT CCTGTATGCT GCAACTCATG AACTTGGCCA TTCTTTGGGT ATGGGACATT   720
            CCTCTGATCC TAATGCAGTG ATGTATCCAA CCTATGGAAA TGGAGATCCC CAAAATTTTA   780
            AACTTTCCCA GGATGATATT AAAGGCATTC AGAAACTATA TGGAAAGAGA AGTAATTCAA   840
            GAAAGAAATA GAAACTTCAG GCAGAACATC CATTCATTCA TTCATTGGAT TGTATATCAT   900
            TGTTGCACAA TCAGAATTGA TAAGCACTGT TCCTCCACTC CATTTAGCAA TTATGTCACC   960
            CTTTTTTATT GCAGTTGGTT TTTGAATGTC TTTCACTCCT TTTATTGGTT AAACTCCTTT   1020
            ATGGTGTGAC TGTGTCTTAT TCCATCTATG AGCTTTGTCA GTGCGCGTAG ATGTCAATAA   1080
            ATGTTACATA CACAAATAAA TAAAATGTTT ATTCCATGGT AAATTTA
```

Seq ID NO: 622 Protein sequence
Protein Accession #: NP_002414.1

```
            1          11         21         31         41         51
            |          |          |          |          |          |
            MRLTVLCAVC LLPGSLALPL PQEAGGMSEL QWEQAQDYLK RFYLYDSETK NANSLEAKLK   60
            EMQKFFGLPI TGMLNSRVIE IMQKPRCGVP DVAEYSLFPN SPKWTSKVVT YRIVSYTRDL   120
            PHITVDRLVS KALNMWGKEI PLHFRKVVWG TADIMIGFAR GAHGDSYPFD GPGNTLAHAF   180
            APGTGLGGDA HFDEDERWTD GSSLGINFLY AATHELGHSL GMGHSSDPNA VMYPTYGNGD   240
            PQNFKLSQDD IKGIQKLYGK RSNSRKK
```

Seq ID NO: 623 DNA sequence
Nucleic Acid Accession #: NM_031457.1
Coding sequence: 204..956

```
            1          11         21         31         41         51
            |          |          |          |          |          |
            AAACAGGAAA TAAATACGAA TGAAACTGAG CTCTAAGCAG CATGTAACCT GGCCTGCATC   60
            CAGGAAATAG AGGACTTCGG ATCCTTCTAA CCCTACCACC CAACTGGCCC CAGTACATTC   120
            ATTCTCTCAG GAAAAAAAAC AAGGTCCCCA CAGCAAAGAA AAGGAATAGG ATCAAGAGAT   180
            ACGTGGCTGC TGGCAGAGCA AGCATGAATT CGATGACTTC AGCAGTTCCG GTGGCCAATT   240
            CTGTGTTGGT GGTGGCACCC CACAATGGTT ATCCTGTGAC CCCAGGAATT ATGTCTCACG   300
            TGCCCCTGTA TCCAAACAGC CAGCCGCAAG TCCACCTAGT TCCTGGGAAC CCACCTAGTT   360
            TGGTGTCGAA TGTGAATGGG CAGCCTGTGC AGAAAGCTCT GAAAGAAGGC AAAACCTTGG   420
            GGGCCATCCA GATCATCATT GGCCTGGCTC ACATCGGCCT CGGCTCCATC ATGGCGACGG   480
            TTCTCGTAGG GGAATACCTG TCTATTTCAT TCTACGGAGG CTTTCCCTTC TGGGGAGGCT   540
            TGTGGTTTAT CATTTCAGGA TCTCTCTCCG TGGCAGCAGA AAATCAGCCA TATTCTTATT   600
            GCCTGCTGTC TGGCAGTTTG GGCTTGAACA TCGTCAGTGC AATCTGCTCT GCAGTTGGAG   660
            TCATACTCTT CATCACAGAT CTAAGTATTC CCCACCCATA TGCCTACCCC GACTATTATC   720
            CTTACGCCTG GGGTGTGAAC CCTGGAATGG CGATTTCTGG CGTGCTGCTG GTCTTCTGCC   780
            TCCTGGAGTT TGGCATCGCA TGCGCATCTT CCCACTTTGG CTGCCAGTTG GTCTGCTGTC   840
            AATCAAGCAA TGTGAGTGTC ATCTATCCAA ACATCTATGC AGCAAACCCA GTGATCACCC   900
            CAGAACCGGT GACCTCACCA CCAAGTTATT CCAGTGAGAT CCAAGCAAAT AAGTAAGGCT   960
            ACAGATTCTG GAAGCATCTT TCACTGGGAC CAAAAGAAGT CCTCCTCCCT TTCTGGGCTT   1020
            CCATAACCCA GGTCGTTCCT GTTCTGACAG CTGAGGGAAAC GTCTCTCCCA CTGTTTGTAC   1080
            TCTCACCTTC ATTCTTCAAT TCAGTCTAGG AAACCATGCT GTTTCTCTAT CAAGAAGAAG   1140
            ACAGAGATTT TAAACAGATG TTAACCAAGA GGGACTCCCT AGGGCACATG CATCAGCACA   1200
            TATGTGGGCA TCCAGCCTCT GGGGCCTTGG CACACACACA TTCGTGTGCT CTGCTGCATG   1260
```

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        TGAGCTTGTG GGTTAGAGGA ACAAATATCT AGACATTCAA TCTTCACTCT TTCAATTGTG  1320
        CATTCATTTA ATAAATAGAT ACTGAGCATT CAAAAAAAAA AAAAAAAAA
```

5   Seq ID NO: 624 Protein sequence
    Protein Accession #: NP_113645.1

```
        1          11         21         31         41         51
        |          |          |          |          |          |
10      MNSMTSAVPV ANSVLVVAPH NGYPVTPGIM SHVPLYPNSQ PQVHLVPGNP PSLVSNVNGQ   60
        PVQKALKEGK TLGAIQIIIG LAHIGLGSIM ATVLVGEYLS ISFYGGPPFW GGLWFIISGS  120
        LSVAAENQPY SYCLLSGSLG LNIVSAICSA VGVILFITDL SIPHPYAYPD YYPYAWGVNP  180
        GMAISGVLLV FCLLEFGIAC ASSHFGCQLV CCQSSNVSVI YPNIYAANPV ITPEPVTSPP  240
        SYSSEIQANK
```

15 Seq ID NO: 625 DNA sequence
    Nucleic Acid Accession #: NM_005221.3
    Coding sequence: 1..870

```
        1          11         21         31         41         51
20      |          |          |          |          |          |
        ATGACAGGAG TGTTTGACAG AAGGGTCCCC AGCATCCGAT CCGGCGACTT CCAAGCTCCG   60
        TTCCAGACGT CCGCAGCTAT GCACCATCCG TCTCAGGAAT CGCCAACTTT GCCCGAGTCT  120
        TCAGCTACCG ATTCTGACTA CTACAGCCCT ACGGGGGGAG CCCCGCACGG CTACTGCTCT  180
25      CCTACCTCGG CTTCCTATGG CAAAGCTCTC AACCCCTACC AGTATCAGTA TCACGGCGTG  240
        AACGGCTCCG CCGGGAGCTA CCCAGCCAAA GCTTATGCCG ACTATAGCTA CGCTAGCTCC  300
        TACCACCAGT ACGGCGGCGC CTACAACCGC GTCCCAAGCG CCACCAACCA GCCAGAGAAA  360
        GAAGTGACCG AGCCCGAGGT GAGAATGGTG AATGGCAAAC CAAAGAAAGT TCGTAAACCC  420
        AGGACTATTT ATTCCAGCTT TCAGCTGGCA GCATTACAGA GAAGGTTTCA GAAGACTCAG  480
30      TACCTCGCCT TGCCGGAACG CGCCGAGCTG GCCGCCTCGC TGGGATTGAC ACAAACACAG  540
        GTGAAAATCT GGTTTCAGAA CAAAAGATCC AAGATCAAGA AGATCATGAA AAACGGGGAG  600
        ATGCCCCGG AGCACAGTCC CAGCTCCAGC GACCCAATGG CGTGTAACTC GCCGCAGTCT  660
        CCAGCGGTGT GGGAGCCCCA GGGCTCGTCC CGCTCGCTCA GCCACCACCC TCATGCCCAC  720
        CCTCCGACCT CCAACCAGTC CCCAGCGTCC AGCTACCTGG AGAACTCTGC ATCCTGGTAC  780
        ACAAGTGCAG CCAGCTCAAT CAATTCCCAC CTGCCGCCGC CGGGCTCCTT ACAGCACCCG  840
35      CTGGCGCTGG CCTCCGGGAC ACTCTATTAG
```

    Seq ID NO: 626 Protein sequence
    Protein Accession #: NP_005212.1

```
        1          11         21         31         41         51
40      |          |          |          |          |          |
        MTGVFDRRVP SIRSGDFQAP FQTSAAMHHP SQESPTLPES SATDSDYYSP TGGAPHGYCS   60
        PTSASYGKAL NPYQYQYHGV NGSAGSYPAK AYADYSYASS YHQYGGAYNR VPSATNQPEK  120
        EVTEPEVRMV NGKPKKVRKP RTIYSSFQLA ALQRRFQKTQ YLALPERAEL AASLGLTQTQ  180
45      VKIWFQNKRS KIKKIMKNGE MPPEHSPSSS DPMACNSPQS PAVWEPQGSS RSLSHHPHAH  240
        PPTSNQSPAS SYLENSASWY TSAASSINSH LPPPGSLQHP LALASGTLY
```

    Seq ID NO: 627 DNA sequence
    Nucleic Acid Accession #: NM_014420
50 Coding sequence: 118..792

```
        1          11         21         31         41         51
        |          |          |          |          |          |
        GCACGAGAGA CGACGTGCTG AGCTGCCAGC TTAGTGGAAG CTCTGCTCTG GGTGGAGAGC   60
55      AGCCTCGCTT TGGTGACGCA CAGTGCTGGG ACCCTCCAGG AGCCCCGGGA TTGAAGGATG  120
        GTGGCGGCCG TCCTGCTGGG GCTGAGCTGG CTCTGCTCTC CCCTGGGAGC TCTGGTCCTG  180
        GACTTCAACA ACATCAGGAG CTCTGCTGAC CTGCATGGGG CCGGAAGGG CTCACAGTGC  240
        CTGTCTGACA CGGACTGCAA TACCAGAAAG TTCTGCCTCC AGCCCCGCGA TGAGAAGCCG  300
60      TTCTGTGCTA CATGTCGTGG GTTGCGGAGG AGGTGCCAGC GAGATGCCAT GTGCTGCCCT  360
        GGGCACTCT GTGTGAACGA TGTTTGTACT ACGATGGAAG ATGCAACCCC AATATTAGAA  420
        AGGCAGCTTG ATGAGCAAGA TGGCACACAT GCAGAAGGAA CAACTGGGCA CCCAGTCCAG  480
        GAAAACCAAC CCAAAAGGAA GCCAAGTATT AAGAAATCAC AAGGCAGGAA GGGACAAGAG  540
        GGAGAAAGTT GTCTGAGAAC TTTTGACTGT GGCCCTGGAC TTTGCTGTGC TCGTCATTTT  600
65      TGGACGAAAA TTTGTAAGCC AGTCCTTTTG GAGGGACAGG TCTGCTCCAG AAGAGGGCAT  660
        AAAGACACTG CTCAAGCTCC AGAAATCTTC CAGCGTTGCG ACTGTGGCCC TGGACTACTG  720
        TGTCGAAGCC AATTGACCAG CAATCGGCAG CATGCTCGAT TAAGAGTATG CCAAAAAATA  780
        GAAAAGCTAT AAATATTTCA AAATAAAGAA GAATCCACAT TGCAAAAAAA AAAAAAAAAA  840
        A
```

70 Seq ID NO: 628 Protein sequence
    Protein Accession #: NP_055235

```
        1          11         21         31         41         51
75      |          |          |          |          |          |
        MVAAVLLGLS WLCSPLGALV LDFNNIRSSA DLHGARKGSQ CLSDTDCNTR KFCLQPRDEK   60
        PFCATCRGLR RRCQRDAMCC PGTLCVNDVC TTMEDATPIL ERQLDEQDGT HAEGTTGHPV  120
        QENQPKRKPS IKKSQGRKGQ EGESCLRTFD CGPGLCCARH FWTKICKPVL LEGQVCSRRG  180
        HKDTAQAPEI FQRCDCGPGL LCRSQLTSNR QHARLRVCQK IEKL
```

80 Seq ID NO: 629 DNA sequence
    Nucleic Acid Accession #: NM_002448.1
    Coding sequence: 241..1134

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        1          11         21         31         41         51
```

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        |         |         |         |         |         |
        GCGCGAGTGC TCCCGGGAAC TCTGCCTGCG CGGCGGCAGC GACCGGAGGC CAGGCCCAGC    60
        ACGCGGGAGC TGGCCTGCTG GGGAGGGGCG GGAGGCGCGC GCGGGAGGGT CCGCCCGGCC   120
        AGGCCCCGGG CCCTCGCAGA GGCCGGCCGC GCTCCCAGCC CGCCCGGAGC CCATGCCCGG   180
5       CGGCTGGCCA GTGCTGCGGC AGAAGGGGGG GCCCGGCTCT GCATGGCCCC GGCTGCTGAC   240
        ATGACTTCTT TGCCACTCGG TGTCAAAGTG GAGGACTCCG CCTTCGGCAA GCCGGCGGGG   300
        GGAGGCGCGG GCCAGGCCCC CAGCGCCGCC GCGGCCCACGG CAGCCGCCAT GGGGCGCGGAC   360
        GAGGAGGGGG CCAAGCCCAA AGTGTCCCCT TCGCTCCTGC CCTTCAGCGT GGAGGCGCTC   420
        ATGGCCGACC ACAGGAAGCC GGGGGCCAAG GAGAGCGCCC TGGCGCCCTC CGAGGGCGTG   480
10      CAGGCGGCGG GTGGCTCGGC GCAGCCACTG GGCGTCCCGC CGGGGTCGCT GGGAGCCCCG   540
        GACGCGCCCT CTTCGCCGCG GCCGCTCGGC CATTTCTCGG TGGGGGGACT CCTCAAGCTG   600
        CCAGAAGATG CGCTCGTCAA AGCCGAGAGC CCCGAGAAGC CGGAGAGGAC CCCGTGGATG   660
        CAGAGCCCCC GCTTCTCCCC GCCGCCGGCC AGGCGGCTGA GCCCCCCAGC CTGCACCCTC   720
        CGCAAACACA AGACGAACCG TAAGCCGCGG ACGCCCCTTCA CCACCGCGCA GCTGCTGGCG   780
15      CTGGAGCGCA AGTTCCGCCA GAAGCAGTAC CTGTCCATCG CCGAGCGCGC GGAGTTCTCC   840
        AGCTCGCTCA GCCTCACTGA GACGCAGGTG AAGATATGGT TCCAGAACCG CCGGCCAAG    900
        GCAAAGAGAC TACAAGAGGC AGAGCTGGAG AAGCTGAAGA TGGCCGCCAA GCCCATGCTG   960
        CCACCGGCTG CCTTCGGCCT CTCCTTCCCT CTCGGCGGCC CCGCAGCTGT·AGCGGCCGCG  1020
        GCGGGTGCCT CGCTCTACGG TGCCTCTGGC CCCTTCCAGC CGCGCTGCTT GCCTGTGGCG  1080
20      CCCGTGGGAC TCTACACGGC CCATGTGGGC TACAGCATGT ACCACCTGAC ATAGAGGGTC  1140
        CCAGGTCCCC ACCTGTGGGC CAGCCGATTC CTCCAGCCCT GGTGCTGTAC CCCCGACGTG  1200
        CTCCCCTGCT CGGCACCGCC AGCCGCCTTC CCTTTAACCC TCACACTGCT CCAGTTTCAC  1260
        CTCTTTGCTC CCTGAGTTCA CTCTCCGAAG TCTGATCCCT GCCAAAAAGT GGCTGGAAGA  1320
        GTCCCTTAGT ACTCTTCTAG CATTTAGATC TACACTCTCG AGTTAAAGAT GGGGAAACTG  1380
25      AGGGCAGAGA GGTTAACAGA TTTATCTAGG GTCCCCAGCA GAATTGACAG TTGAACAGAG  1440
        CTAGAGGCCA TGTCTCCTGC ATAGCTTTTC CCTGTCCTGA CACCAGGCAA GAAAAGCGCA  1500
        GAGAAATCGG TGTCTGACGA TTTTGGAAAT GAGAACAATC TCAAAAAAAA AAAAAAAAA  1560
        AAAAAAAAAA GAAAGAGAA AAAAAAGACT AGCCAGCCAG GAAGATGAAT CCTAGCTTCT  1620
        TCCATTGGAA AATTTAAGAC AAGTTCAACA ACAAAACATT TGCTCTGGGG GGCAGGGAAA  1680
30      ACACAGATGT GTTGCAAAGG TAGGTTGAAG GGA
```

Seq ID NO: 630 Protein sequence
Protein Accession #: NP_002439.1

```
        1         11        21        31        41        51
        |         |         |·        |         |         |
        MTSLPLGVKV EDSAFGKPAG GGAGQAPSAA AATAAAMGAD EEGAKPKVSP SLLPFSVEAL    60
        MADHRKPGAK ESALAPSEGV QAAGGSAQPL GVPPGSLGAP DAPSSPRPLG HFSVGGLLKL   120
        PEDALVKAES PEKPERTPWM QSPRFSPPPA RRLSPPACTL RKHKTNRKPR TPFTTAQLLA   180
        LERKFRQKQY LSIAERAEFS SSLSLTETQV KIWFQNRRAK ARRLQEAELE KLKMAAKPML   240
        PPAAFGLSFP LGGPAAVAAA AGASLYGASG PFQRAALPVA PVGLYTAHVG YSMYHLT
```

Seq ID NO: 631 DNA sequence
Nucleic Acid Accession #: NM_002557.1
Coding sequence: 13..2049

```
        1         11        21        31        41        51
        |         |         |         |         |         |
        CAGACCATTG AGATGTGGAA GCTGTTGCTG TGGGTTGGGC TGGTTCTTGT GCTGAAACAC    60
        CACGATGGTG CTGCCCATAA ACTCGTGTGT TATTTCACCA ACTGGGCACA CAGTCGGCCA   120
        GGCCCTGCCT CGATCTTGCC CCATGACCTG GACCCCTTTC TCTGCACCCA CCTGATATTT   180
        GCCTTTGCCT CAATGAACAA CAATCAGATT GTTGCTAAGG ATCTCCAGGA TGAGAAAATT   240
        CTCTACCCAG AGTTCAACAA ACTAAAGGAG AGGAACAGAG AGCTGAAAAC ACTACTGTCC   300
        ATCGGCGGGT GGAACTTTGG CACCTCAAGA TTCACCACTA TGTTGTCCAC ATTTGCCAAC   360
        CGTGAAAAGT TTATTGCTTC AGTTATATCC CTTCTGAGGA CACATGACTT TGATGGTCTT   420
        GACCTTTTCT TCTTATATCC TGGACTAAGA GGCAGCCCCA TGCATGACCG GTGGACTTTT   480
        CTCTTCTTAA TTGAAGAGCT CCTGTTTGCC TTCCGGAAGG AGGCACTGCT CACCATGCGC   540
        CCGAGGCTGC TGCTGTCTGC TGCTGTTTCT GGGGTCCCAC ACATCGTCCA AACATCCTAT   600
        GATGTGCGCT TTCTAGGAAG ACTCCTGGAT TTCATCAATG TCTTGTCTTA TGACTTACAT   660
        GGAAGTTGGG AAAAGGTTCAC AGGACATAAT AGCCCCCTCT TCTCTCTGCC TGAAGACCCC   720
        AAATCTTCGG CATATGCTAT GAATTATTGG AGAAAGCTTG GGGCACCCTC AGAGAAGCTC   780
        ATCATGGGGA TCCCCACCTA TGGACGTACC TTTCGCCTCC TCAAAGCCTC TAAGAATGGG   840
        TTGCAGGCCA GAGCGATCGG ACCAGCATCT CCAGGGAAGT ACACCAAGCA AGAAGGCTTC   900
        TTGGCTTATT TTGAGATTTG TTCCTTTGTC TGGGGAGCGA AGAAGCACTG GATTGATTAC   960
        CAGTATGTCC CGTATGCCAA CAAGGGGAAA GAGTGGGTTG GCTATGACAA TGCCATCAGC  1020
        TTCAGTTACA AGGCATGGTT TATAAGGCGA GAGCATTTTG GGGGGGCCAT GGTGTGGGACA  1080
        TTGGACATGG ATGACGTCAG GGGCACGTTC TGTGGCACTG GCCCTTTCCC CCTTGTCTAC  1140
        GTATTGAATG ATATCCTGGT GCGGGCTGAG TTCAGTTCAA CTTCTTTACC ACAATTTTGG  1200
        CTGTCATCTG CTGTGAATTC TTCAAGCACT GACCCTGAAA GGCTGGCTGA GACCACGGCA  1260
        TGGACCACTG ATAGTAAGAT TTTGCCCCCA GGAGGAGAGG CTGGGGTCAC TGAGATCCAC  1320
        GGAAAGTGTG AAAATATGAC TATAACCCCT AGAGGTACAA CTGTGACCCC TACAAAGGAA  1380
        ACTGTATCCC TTGGAAAGCA CACTGTAGCT CTAGGAGAGA AGACTGAGAT CACTGGGGCA  1440
        ATGACCATGA CTTCTGTGGG TCATCAGTCC ATGACCCCTG GAGAGAAGGC CCTGACCCCT  1500
        GTGGGTCATC AATCTGTGAC CACTGGACAG AAGACCCTGA CCTCTGTGGG TTATCAGTCT  1560
        GTGACCCCTG GGAAAAAGAC CCTGACCCCT GTGGGTCATC AGTCTGTGAC CCCTGTGAGT  1620
        CATCAGTCTG TGAGCCCTGG AGGAACGACT ATGACCCCTG TCCATTTTCA GACTGAGACC  1680
        CTTAGACAGA ATACAGTGGC CCCTAGAAGG AAGGCTGTGG CCCGTGAAAA GGTGACTGTC  1740
        CCCTCCAGAA ACATATATCAGT CACCCCTGAA GGGCAGACTA TGCCTTTAAG AGGGGAGAAT  1800
        TTGACTTCTG AGGTGGGCAC TCACCCCAGG ATGGGTAACT TGGGTCTTCA GATGGAAGCT  1860
        GAAAACAGGA TGATGCTGTC CTCCAGCCCC GTCATCCAGC TCCCGGAACA AACTCCTCTA  1920
        GCTTTTGACA ACGCTTTTGT TCCCATCTAT GGAAACCATT CCTCTGTCAA CTCAGTAACC  1980
        CCTCAAACAA GTCCTCTTTC TCTAAAAAAA GAAATCCCAA AAACTCTGC TGTGGATGAA  2040
        GAAGCCTAAG CCCCTCTGGT GTCAGAAACC AGGGAAAACC CTTGTCTTTT CTTCTAAGTG  2100
        ACATGTTGGA AGCCTTCTCA TCCCGGGGCA AAGCAGGCAT CAAAACCAGA ATAGGCCAAT  2160
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CTCTTTTCCA TTAAATAAAC TGTAAACACA AGAACCCA

Seq ID NO: 632 <u>Protein sequence</u>
Protein Accession #: NP_002548.1

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1          11         21         31         41         51
|          |          |          |          |          |
MWKLLLWVGL VLVLKHHDGA AHKLVCYFTN WAHSRPGPAS ILPHDLDPFL CTHLIFAFAS   60
MNNNQIVAKD LQDEKILYPE FNKLKERNRE LKTLLSIGGW NFGTSRFTTM LSTFANREKF  120
IASVISLLRT HDFDGLDLFF LYPGLRGSPM HDRWTFLFLI EELLFAFRKE ALLTMRPRLL  180
LSAAVSGVPH IVQTSYDVRF LGRLLDFINV LSYDLHGSWE RFTGHNSPLF SLPEDPKSSA  240
YAMNYWRKLG APSEKLIMGI PTYGRTFRLL KASKNGLQAR AIGPASPGKY TKQEGFLAYF  300
EICSFVWGAK KHWIDYQYVP YANKGKEWVG YDNAISFSYK AWFIRREHFG GAMVWTLDMD  360
DVRGTFCGTG PPPLVYVLND ILVRAEFSST SLPQFWLSSA VNSSSTDPER LAVTTAWTTD  420
SKILPPGGEA GVTEIHGKCE NMTITPRGTT VTPTKETVSL GKHTVALGEK TEITGAMTMT  480
SVGHQSMTPG EKALTPVGHQ SVTTGQKTLT SVGYQSVTPG EKTLTPVGHQ SVTPVSHQSV  540
SPGGTTMTPV HFQTETLRQN TVAPRRKAVA REKVTVPSRN ISVTPEGQTM PLRGENLTSE  600
VGTHPRMGNL GLQMEAENRM MLSSSPVIQL PEQTPLAFDN RFVPIYGNHS SVNSVTPQTS  660
PLSLKKEIPE NSAVDEEA
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Seq ID NO: 633 <u>DNA sequence</u>
Nucleic Acid Accession #: NM_003885.1
Coding sequence: 98..1021

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1          11         21         31         41         51
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AAACTCAGAA TTTTCGCGGG CTCGGTGAGC GGTTTTATCC CTCCGGCCGG CAGGCTGGGC   60
GCAGGGGGCG AGCCCCCGCC CGGCGCGCAG CAGCACCATG GGCACGGTGC TGTCCCTGTC  120
TCCCAGCTAC CGGAAGGCCA CGCTGTTTGA GGATGGCGCG GCCACCGTGG GCCACTATAC  180
GGCCGTACAG AACAGCAAGA ACGCCAAGGA CAAGAACCTG AAGCGCCACT CCATCATCTC  240
CGTGCTGCCT TGGAAGAGAA TCGTGGCCGT GTCGGCCAAG AAGAAGAACT CCAAGAAGGT  300
GCAGCCTAAC AGCCAGCTACC AGAACAACAT CACGCACCTC AACAATGAGA ACCTGAAGAA  360
GTCGCTGTCG TGCGCCAACC TGTCCACATT CGCCCAGCCC CCACCGGCCG AGCCGCCTGC  420
ACCCCCGGCC AGCCAGCTCT CGGGTTCCCA GACCGGGGGC TCCTCCTCAG TCAAGAAAGC  480
CCCTCACCCT GCCGTCACCT CCGCAGGGAC GCCCAAACGG GTCATCGGTCC AGGCGGTCCAC  540
CAGTGAGCTG CTTCGCTGCC TGGGTGAGTT TCTCTGCCGC CGGTGCTACC GCCTGAAGCA  600
CCTGTCCCCC ACGGACCCCG TGCTCTGGCT GCGCAGCGTG GACCGCTCGC TGCTTCTGCA  660
GGGCTGGCAG GACCAGGGCT TCATCACGCC GGCCAACGTG GTCTTCCTCT ACATGCTCTG  720
CAGGGATGTT ATCTCCTCCG AGGTGGGCTC GGATCACGAG CTCCAGGCCG TCCTGCTGAC  780
ATGCCTGTAC CTCTCCTACT CCTACATGGG CAACGAGATC TCCTACCCGC TCAGCCCCTT  840
CCTGGTGGAG AGCTGCAAGG AGGCCTTTTG GGACCGTTGC CTCTCTGTCA TCAACCTCAT  900
GAGCTCAAAG ATGCTGCAGA TAAATGCCGA CCCACACTAC TTCACACAGG TCTTCTCCGA  960
CCTGAAGAAC GAGAGCGGCC AGGAGGACAA GAAGCGGCTC CTCCTAGGCC TGGATCGGTG 1020
AGCACTGTAG CCTGCGTCAT GGCTCAAGGA TTCAATGCAT TTTTAAGAAT TTATTATTAA 1080
ATCAGTTTTG TGTACAG
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Seq ID NO: 634 <u>Protein sequence</u>
Protein Accession #: NP_003876.1

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1          11         21         31         41         51
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MGTVLSLSPS YRKATLFEDG AATVGHYTAV QNSKNAKDRN LKRESIISVL PWKRIVAVSA   60
KKKNSKKVQP NSSYQNNITH LNNENLKKSL SCANLSTFAQ PPPAQPPAPP ASQLSGSQTG  120
GSSSVKKAPH PAVTSAGTPK RVIVQASTSE LLRCLGEFLC RRCYRLKHLS PTDPVLWLRS  180
VDRSLLLQGW QDQGFITPAN VVFLYMLCRD VISSEVGSDH ELQAVLLTCL YLSYSYMGNE  240
ISYPLKPFLV ESCKEAFWDR CLSVINLMSS KMLQINADPH YFTQVFSDLK NESGQEDKKR  300
LLLGLDR
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TABLE 79A:

Pkey: Unique Eos probeset identifier number
ExAccn: Exemplar Accession number, Genbank accession number
UnigeneID: Unigene number
Unigene Title: Unigene gene title
Seq ID No.:   Sequence identification number linking information in Table 79A to sequences in Table 80

Pkey	ExAccn	UnigeneID	Unigene Title	Seq ID No.
424212	NM_005814	Hs.143131	glycoprotein A33 (transmembrane)	Seq ID No. C1 & C217
424503	NM_002205	Hs.149609	Integrin, alpha 5 (fibronectin receptor,	Seq ID No. C2 & C218
418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	Seq ID No. C3 & C219
418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	Seq ID No. C4 & C220
418738	AW388633	Hs.6682	solute carrier family 7, (cationic amino	Seq ID No. C5 & C221
443646	AI085198	Hs.164226	Thrombospondin 1	Seq ID No. C6 & C222
409956	AW103364	Hs.727	Inhibin, beta A (activin A, activin AB a	Seq ID No. C7 & C223
422867	L32137	Hs.1584	cartilage oligomeric matrix protein (pse	Seq ID No. C8 & C224
444381	BE387335	Hs.283713	hypothetical protein BC014245	Seq ID No. C9 & C225
421582	AI910275	Hs.350470	trefoil factor 1 (breast cancer, estroge	Seq ID No. C10 & C226
411789	AF245505	Hs.72157	Adlican	Seq ID No. C11 & C227
452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fis, clone PL	Seq ID No. C12
428698	AA852773	Hs.334838	KIAA1866 protein	Seq ID No. C13 & C228
421552	AF026692	Hs.105700	secreted frizzled-related protein 4	Seq ID No. C14 & C229
425247	NM_005940	Hs.155324	matrix metalloproteinase 11 (stromelysin	Seq ID No. C15 & C230
432201	AI538613	Hs.298241	Transmembrane protease, serine 3	Seq ID No. C16 & C231
447377	X77343	Hs.334334	transcription factor AP-2 alpha	Seq ID No. C17 & C232
446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	Seq ID No. C18 & C233
418888	AU076801	Hs.89436	cadherin 17, LI cadherin (liver-intestin	Seq ID No. C19 & C234
432179	X75208	Hs.2913	EphB3	Seq ID No. C20 & C235
422578	AF239666	Hs.1545	caudal type homeo box transcription fact	Seq ID No. C21 & C236
409889	AW630041	Hs.56937	suppression of tumorigenicity 14 (colon	Seq ID No. C22 & C237
447033	AI357412	Hs.157601	Predicted gene: Eos cloned; secreted w/V	Seq ID No. C23 & C238
447033	AI357412	Hs.157601	Predicted gene: Eos cloned; secreted w/V	Seq ID No. C24 & C239
411975	AI916058	Hs.144583	3'UTR of: dead ringer (Drosophila)-like	Seq ID No. C25 & C240
434206	AW136973	Hs.362915	ESTs, Weakly similar to S69890 mitogen I	Seq ID No. C26 & C241
423936	U77629	Hs.135639	achaete-scute complex (Drosophila) homol	Seq ID No. C27 & C242
447400	AK000322	Hs.18457	hypothetical protein FLJ20315	Seq ID No. C28 & C243
449032	AA045573	Hs.22900	nuclear factor (erythroid-derived 2)-lik	Seq ID No. C29 & C244
415214	AI445236	Hs.125124	EphB2	Seq ID No. C30 & C245
443247	BE614387	Hs.333893	c-Myc target JPO1	Seq ID No. C31 & C246
422048	NM_012445	Hs.288126	spondin 2, extracellular matrix protein	Seq ID No. C32 & C247
410418	D31382	Hs.63325	transmembrane protease, serine 4	Seq ID No. C33 & C248
446342	BE298665	Hs.14846	solute carrier family 7 (cationic amino	Seq ID No. C34 & C249
411274	NM_002776	Hs.69423	kallikrein 10	Seq ID No. C35 & C250
104978	AI199268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	Seq ID No. C36 & C251
422260	AA315993	Hs.105484	regenerating gene type IV	Seq ID No. C37 & C252
409041	AB033025	Hs.50081	Hypothetical protein, XP_051860 (KIAA119	Seq ID No. C38 & C253
420344	BE463721	Hs.97101	putative G protein-coupled receptor	Seq ID No. C39 & C254
422163	AF027208	Hs.112360	prominin (mouse)-like 1	Seq ID No. C40 & C255
437935	AW939591	Hs.5940	mucin 13, epithelial transmembrane	Seq ID No. C41 & C256
422330	D30783	Hs.115263	epiregulin	Seq ID No. C42 & C257
408908	BE296227	Hs.250822	serine/threonine kinase 15	Seq ID No. C43 & C258
407811	AW190902	Hs.40099	cysteine knot superfamily 1, BMP antagon	Seq ID No. C44 & C259
437852	BE001836	Hs.256897	putative GPCR	Seq ID No. C45 & C260
408243	Y00787	Hs.624	interleukin 8	Seq ID No. C46 & C261
426088	AF038007	Hs.166196	ATPase, Class I, type 8B, member 1	Seq ID No. C47 & C262
439738	BE246502	Hs.9598	sema domain, immunoglobulin domain (Ig),	Seq ID No. C48 & C263
419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	Seq ID No. C49 & C264
450983	AA305384	Hs.25740	ERO1 (S. cerevisiae)-like	Seq ID No. C50 & C265
417771	AA804698	Hs.82547	retinoic acid receptor responder (tazaro	Seq ID No. C51 & C266
421379	Y15221	Hs.103982	small inducible cytokine subfamily B (Cy	Seq ID No. C52 & C267
442006	AW975183	Hs.372210	ESTs, Weakly similar to S72482 hypotheti	Seq ID No. C53 & C268
413048	M93221	Hs.75182	mannose receptor, C type 1	Seq ID No. C54 & C269
443324	R44013	Hs.164225	ESTs	Seq ID No. C55 & C270
424917	AI636208	Hs.96901	hypothetical protein FLJ23049	Seq ID No. C56 & C271
424917	AI636208	Hs.96901	hypothetical protein FLJ23049	Seq ID No. C57 & C272
444527	NM_005408	Hs.11383	small inducible cytokine subfamily A (Cy	Seq ID No. C58 & C273
442652	AI005163	Hs.201378	Homo sapiens cDNA FLJ40427 fis	Seq ID No. C59 & C274
450726	AW204600	Hs.355462	HUMPSPBA Human pulmonary surfactant-asso	Seq ID No. C60 & C275
416965	N26223	Hs.160436	MDAC1	Seq ID No. C61 & C276
442275	AW449467	Hs.54795	Homo sapiens secretoglobin, family 3A, m	Seq ID No. C62 & C277
431745	AW972448	Hs.163425	Novel FGENESH predicted cadherin repeat	Seq ID No. C63 & C278
431745	AW972448	Hs.163425	Novel FGENESH predicted cadherin repeat	Seq ID No. C64 & C279
453142	AA033648	Hs.7473	Homo sapiens gap junction protein, alpha	Seq ID No. C65 & C280
421659	NM_014459	Hs.106511	protocadherin 17	Seq ID No. C66 & C281
444090	S69115	Hs.10306	natural killer cell group 7 sequence	Seq ID No. C67 & C282
421563	NM_006433	Hs.105806	granulysin	Seq ID No. C68 & C283
430413	AW842182	Hs.241392	small inducible cytokine A5 (RANTES)	Seq ID No. C69 & C284
414991	C17898		Homo sapiens up-regulated by BCG-CWS (LO	Seq ID No. C70 & C285
419833	AA251131	Hs.220697	Homo sapiens tryptophanyl-tRNA synthetas	Seq ID No. C71 & C286
424943	AU077260	Hs.153924	death-associated protein kinase 1	Seq ID No. C72 & C287

1194

430890	X54232	Hs.2699	glypican 1	Seq ID No. C73 & C288
452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	Seq ID No. C74 & C289
439180	AI393742	Hs.199057	v-erb-b2 avian erythroblastic leukemia v	Seq ID No. C75 & C290
410407	X66839	Hs.63287	carbonic anhydrase IX	Seq ID No. C76 & C291
418526	BE019020	Hs.85838	solute carrier family 16 (monocarboxylic	Seq ID No. C77 & C292
422627	BE336857	Hs.118787	transforming growth factor, beta-induced	Seq ID No. C78 & C293
430486	BE062109	Hs.241551	chloride channel, calcium activated, fam	Seq ID No. C79 & C294
423673	BE003054	Hs.1695	matrix metalloproteinase 12 (macrophage	Seq ID No. C80 & C295
423673	BE003054	Hs.1695	matrix metalloproteinase 12 (macrophage	Seq ID No. C81 & C296
431846	BE019924	Hs.271580	uroplakin 1B	Seq ID No. C82 & C297
431958	X63629	Hs.2877	cadherin 3, type 1, P-cadherin (placenta	Seq ID No. C83 & C298
448733	NM_005629	Hs.187958	solute carrier family 6 (neurotransmitte	Seq ID No. C84 & C299
426440	BE382756	Hs.169902	solute carrier family 2 (facilitated glu	Seq ID No. C85 & C300
428484	AF104032	Hs.184601	solute carrier family 7 (cationic amino	Seq ID No. C86 & C301
429211	AF052693	Hs.198249	gap junction protein, beta 5 (connexin 3	Seq ID No. C87 & C302
423634	AW959908	Hs.1690	heparin-binding growth factor binding pr	Seq ID No. C88 & C303
457819	AA057484	Hs.35406	FLJ20522 Hypothetical protein FLJ20522	Seq ID No. C89 & C304
424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	Seq ID No. C90 & C305
418462	BE001596	Hs.85266	integrin, beta 4	Seq ID No. C91 & C306
439606	W79123	Hs.58561	G protein-coupled receptor 87	Seq ID No. C92 & C307
407720	AB037776	Hs.38002	immunoglobulin superfamily, member 9	Seq ID No. C93 & C308
418543	NM_005329	Hs.85962	hyaluronan synthase 3	Seq ID No. C94 & C309
417512	X76534	Hs.82226	glycoprotein (transmembrane) nmb	Seq ID No. C95 & C310
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C96 & C311
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C97 & C312
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C98 & C313
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C99 & C314
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C100 & C315
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C101 & C316
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C102 & C317
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	Seq ID No. C103 & C318
421817	AF146074	Hs.108660	ATP-binding cassette, sub-family C (CFTR	Seq ID No. C104 & C319
421817	AF146074	Hs.108660	ATP-binding cassette, sub-family C (CFTR	Seq ID No. C105 & C320
409420	Z15008	Hs.54451	laminin, gamma 2 (nicein (100kD), kalini	Seq ID No. C106 & C321
440659	AF134160	Hs.7327	claudin 1	Seq ID No. C107 & C322
408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	Seq ID No. C108 & C323
408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	Seq ID No. C109 & C324
408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	Seq ID No. C110 & C325
450701	H39960	Hs.288467	hypothetical protein XP_098151 (leucine-	Seq ID No. C111 & C326
414774	X02419	Hs.77274	plasminogen activator, urokinase	Seq ID No. C112 & C327
413691	AB023173	Hs.75478	ATPase, Class VI, type 11B	Seq ID No. C113 & C328
453857	AL080235	Hs.35861	Ras-induced senescence 1 (RIS1)	Seq ID No. C114 & C329
449101	AA205847	Hs.23016	G protein-coupled receptor	Seq ID No. C115 & C330
429263	AA019004	Hs.198396	ATP-binding cassette, sub-family A (ABC1	Seq ID No. C116 & C331
421474	U76362	Hs.104637	solute carrier family 1 (glutamate trans	Seq ID No. C117 & C332
421753	BE314828	Hs.107911	ATP-binding cassette, sub-family B (MDR/	Seq ID No. C118 & C333
408482	NM_000676	Hs.45743	adenosine A2b receptor	Seq ID No. C119 & C334
426761	AI015709	Hs.172089	PORIMIN Pro-oncosis receptor inducing me	Seq ID No. C120 & C335
429736	AF125304	Hs.212680	tumor necrosis factor receptor superfami	Seq ID No. C121 & C336
430985	AA490232	Hs.27323	ESTs, Weakly similar to I78885 serine/th	Seq ID No. C122 & C337
431890	X17033	Hs.271986	integrin, alpha 2 (CD49B, alpha 2 subuni	Seq ID No. C123 & C338
432583	AW023524	Hs.162282	potassium channel TASK-4; potassium chan	Seq ID No. C124 & C339
446872	X97058	Hs.16362	pyrimidinergic receptor P2Y, G-protein c	Seq ID No. C125 & C340
453102	NM_007197	Hs.31664	frizzled (Drosophila) homolog 10	Seq ID No. C126 & C341
428513	BE220806	Hs.184697	plexin C1	Seq ID No. C127 & C342
430280	AA361258	Hs.237868	interleukin 7 receptor	Seq ID No. C128 & C343
428486	AW583497	Hs.184604	pancreatic polypeptide	Seq ID No. C129 & C344
457489	AI693815	Hs.127179	cryptic gene	Seq ID No. C130 & C345
432874	W94322	Hs.279651	melanoma inhibitory activity	Seq ID No. C131 & C346
445891	AW391342	Hs.199460	DPCR1 protein	Seq ID No. C132 & C347
445891	AW391342	Hs.199460	DPCR1 protein	Seq ID No. C133 & C348
404682			ortholog of mouse polydomain protein	Seq ID No. C134 & C349
429547	AW009166	Hs.99376	FGENESH predicted novel secreted protein	Seq ID No. C135 & C350
404287			FGENESH predicted novel CUB-domain conta	Seq ID No. C136 & C351
404287			FGENESH predicted novel CUB-domain conta	Seq ID No. C137 & C352
404287			FGENESH predicted novel CUB-domain conta	Seq ID No. C138 & C353
418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	Seq ID No. C139 & C354
444754	T83911	Hs.11881	transmembrane 4 superfamily member 4	Seq ID No. C140 & C355
432596	AJ224741	Hs.278461	matrilin 3	Seq ID No. C141 & C356
444006	BE395085	Hs.334762	type I transmembrane protein Fn14	Seq ID No. C142 & C357
428505	AL035461	Hs.2281	chromogranin B (secretogranin 1)	Seq ID No. C143 & C358
448844	AI581519	Hs.177164	FGENESH predicted novel cell surface pr	Seq ID No. C144 & C359
448844	AI581519	Hs.177164	FGENESH predicted novel cell surface pr	Seq ID No. C145 & C360
428392	H10233	Hs.2265	secretory granule, neuroendocrine protei	Seq ID No. C146 & C361
448030	N30714	Hs.325960	membrane-spanning 4-domains, subfamily A	Seq ID No. C147 & C362
422109	S73265	Hs.1473	gastrin-releasing peptide	Seq ID No. C148 & C363
449048	Z45051	Hs.22920	similar to S68401 (cattle) glucose induc	Seq ID No. C149 & C354
417931	W95642	Hs.82961	trefoil factor 3 (intestinal)	Seq ID No. C150 & C365
419216	AU076718	Hs.164021	small inducible cytokine subfamily B (Cy	Seq ID No. C151 & C366
426227	U67058	Hs.154299	Human proteinase activated receptor-2 mR	Seq ID No. C152 & C357
413554	AA319146	Hs.75426	secretogranin II (chromogranin C)	Seq ID No. C153 & C368
445417	AK001058	Hs.12680	a disintegrin-like and metalloprotease w	Seq ID No. C154 & C369
426322	J05068	Hs.2012	transcobalamin I (vitamin B12 binding pr	Seq ID No. C155 & C370

	413719	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	Seq ID No. C156 & C371
	431462	AW583672	Hs.256311	granin-like neuroendocrine peptide precu	Seq ID No. C157 & C372
	416498	U33632	Hs.79351	potassium channel, subfamily K, member 1	Seq ID No. C158 & C373
	413095	AA494359	Hs.30715	potassium voltage-gated channel, isk-rel	Seq ID No. C159 & C374
5	426125	X87241	Hs.166994	FAT tumor suppressor (Drosophila) homolo	Seq ID No. C160 & C375
	436729	BE621807	Hs.351316	transmembrane 4 superfamily member 1	Seq ID No. C161 & C376
	437145	AF007216	Hs.5462	solute carrier family 4, sodium bicarbon	Seq ID No. C162 & C377
	451820	AW058357	Hs.199248	ESTs	Seq ID No. C163 & C378
	427557	NM_002659	Hs.179657	plasminogen activator, urokinase recepto	Seq ID No. C164 & C379
10	408308	AL033377	Hs.44197	hypothetical protein DKFZp564D0462	Seq ID No. C165 & C380
	421340	F07783	Hs.1369	decay accelerating factor for complement	Seq ID No. C166 & C381
	428187	AI687303	Hs.285529	G protein-coupled receptor 49	Seq ID No. C167 & C382
	428187	AI687303	Hs.285529	G protein-coupled receptor 49	Seq ID No. C168 & C383
	422278	AF072873	Hs.114218	frizzled (Drosophila) homolog 6	Seq ID No. C169 & C384
15	446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	Seq ID No. C170 & C385
	419452	U33635	Hs.90572	PTK7 protein tyrosine kinase 7	Seq ID No. C171 & C386
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	Seq ID No. C172 & C387
	439659	AW970780	Hs.59483	leucine-rich repeat-containing G protein	Seq ID No. C173 & C388
	411825	AK000334	Hs.352415	solute carrier family 39 (zinc transport	Seq ID No. C174 & C389
20	412314	AA825247	Hs.356084	G protein-coupled receptor 27 (GPR27) (S	Seq ID No. C175 & C390
	429150	AF120103	Hs.197366	smoothened (Drosophila) homolog	Seq ID No. C176 & C391
	419073	AW372170	Hs.183918	transmembrane receptor Unc5H2 mRNA	Seq ID No. C177 & C392
	411828	AW161449	Hs.72290	wingless-type MMTV integration site fami	Seq ID No. C178 & C393
	419508	AW997938	Hs.90786	ATP-binding cassette, sub-family C (CFTR	Seq ID No. C179 & C394
25	421779	AI879159	Hs.108219	wingless-type MMTV integration site fami	Seq ID No. C180 & C395
	439668	AI091277	Hs.302634	frizzled (Drosophila) homolog 8	Seq ID No. C181 & C396
	433336	AF017986	Hs.31386	secreted frizzled-related protein 2 (str	Seq ID No. C182 & C397
	436972	AA284679	Hs.25640	claudin 3	Seq ID No. C183 & C398
	410268	AA316181	Hs.61635	six transmembrane epithelial antigen of	Seq ID No. C184 & C399
30	416370	N90470	Hs.203697	CD38 antigen (p45)	Seq ID No. C185 & C400
	437052	AA861697	Hs.120591	ESTs	Seq ID No. C186 & C401
	421481	AW391972	Hs.104696	KIAA1324 protein	Seq ID No. C187 & C402
	444151	AW972917	Hs.128749	alpha-methylacyl-CoA racemase	Seq ID No. C188 & C403
	426174	AA547959	Hs.115838	Homo sapiens similar to Echinoidin (LOC1	Seq ID No. C189 & C404
35	410037	AB020725	Hs.58009	KIAA0918 protein	Seq ID No. C190 & C405
	425071	NM_013989	Hs.154424	deiodinase, iodothyronine, type II	Seq ID No. C191 & C406
	421829	AB018330	Hs.108708	calcium/calmodulin-dependent protein kin	Seq ID No. C192 & C407
	418576	AW968159	Hs.302740	Epithelial calcium channel 2, CaT-like A	Seq ID No. C193 & C408
	419693	AA133749	Hs.301350	FXYD domain-containing ion transport reg	Seq ID No. C194 & C409
40	419693	AA133749	Hs.301350	FXYD domain-containing ion transport reg	Seq ID No. C195 & C410
	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	Seq ID No. C196 & C411
	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	Seq ID No. C197 & C412
	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	Seq ID No. C198 & C413
	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	Seq ID No. C199 & C414
45	430144	AI732722	Hs.98927	ERGL protein; ERGIC-53-like protein	Seq ID No. C200 & C415
	408833	AW612232	Hs.254835	ESTs	Seq ID No. C201 & C416
	452017	AF109302	Hs.27495	prostate cancer associated protein 7	Seq ID No. C202 & C417
	415992	C05837	Hs.145807	hypothetical protein FLJ13593	Seq ID No. C203 & C418
	415992	C05837	Hs.145807	hypothetical protein FLJ13593	Seq ID No. C204 & C419
50	443991	NM_002250	Hs.10082	potassium intermediate/small conductance	Seq ID No. C205 & C420
	425976	C75094	Hs.334514	NG22 protein	Seq ID No. C206 & C421
	432800	BE391046	Hs.278962	AIM-1 protein	Seq ID No. C207 & C422
	452955	AW390282	Hs.31130	transmembrane 7 superfamily member 2	Seq ID No. C208 & C423
	424339	BE257148	Hs.145416	endoglycan	Seq ID No. C209 & C424
55	425263	NM_001197	Hs.155419	BCL2-interacting killer (apoptosis-induc	Seq ID No. C210 & C425
	421537	BE383488	Hs.105547	neural proliferation, differentiation an	Seq ID No. C211 & C426
	434293	NM_004445	Hs.3796	EphB6	Seq ID No. C212 & C427
	427715	BE245274	Hs.180428	KIAA1181 protein	Seq ID No. C213 & C428
	413049	NM_002151	Hs.823	hepsin (transmembrane protease, serine 1	Seq ID No. C214 & C429
60	414555	N98569	Hs.76422	phospholipase A2, group IIA (platelets,	Seq ID No. C215 & C430
	422424	AI186431	Hs.296638	prostate differentiation factor	Seq ID No. C216 & C431
	432378	AI493046	Hs.146133	ESTs	Seq ID No. C432 & C433
	409041	AB033025	Hs.50081	Hypothetical protein, XP_051860 (KIAA119	Seq ID No. C434 & C435

65   TABLE 79B

Pkey: Unique Eos probeset identifier number
CAT number: Gene cluster number
70 Accession: Genbank accession numbers

Pkey   CAT Number Accession

414991   1785136_1   D78831 C17898 D78863

75   TABLE 79C

Pkey: Unique number corresponding to an Eos probeset
Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham I. et al." refers to the publication entitled "The DNA
          sequence of human chromosome 22." Dunham I. et al., Nature (1999) 402:489-495.
80 Strand: Indicates DNA strand from which exons were predicted.
Nt_position: Indicates nucleotide positions of predicted exons.

Pkey   Ref   Strand   Nt_position

404682	9797231	Minus	40977-41150
404287	2326514	Plus	53134-53281
404287	2326514	Plus	53134-53281
404287	2326514	Plus	53134-53281

5

Table 80:

Seq ID NO: C1 DNA Sequence
Nucleic Acid Accession #: NM_005814
Coding sequence: 345..1304

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AGTAGGTGAC ACATGAGCCC AGCCCCAGCT CACCTGCCAA TCCAGCTGAG GAGCTCACCT    180
GCCAATCCAG CTGAGGCTGG GCAGAGGTGG GTGAGAAGAG GGAAAATTGC AGGGACCTCC    240
AGTTGGGCCA GGCCAGAAGC TGCTGTAGCT TTAACCAGAC AGCTCAGACC TGTCTGGAGG    300
CTGCCAGTGA CAGGTTAGGT TTAGGGCAGA GAAGAAGCAA GACCATGGTG GGGAAGATGT    360
GGCCTGTGTT GTGGACACTC TGTGCAGTCA GGGTGACCGT CGATGCCATC TCTGTGGAAA    420
CTCCGCAGGA CGTTCTTCGG GCTTCGCAGG GAAAGAGTGT CACCCTGCCC TGCACCTACC    480
ACACTTCCAC CTCCAGTCGA GAGGGACTTA TTCAATGGGA TAAGCTCCTC CTCACTCATA    540
CGGAAAGGGT GGTCATCTGG CCGTTTTCAA ACAAAAACTA CATCCATGTG GAGCTTTATA    600
AGAATCGCGT CAGCATATCC AACAATGCTG AGCAGTCCGA TGCCTCCATC ACCATTGATC    660
AGCTGACCAT GGCTGACAAC GGCACCTACG AGTGTTCTGT CTCGCTGATG TCAGACCTGG    720
AGGGCAACAC CAAGTCACGT GTCCGCCTGT TGGTCCTCGT GCCACCCTCC AAACCAGAAT    780
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AGGGCTCACC AACCCCTCAG TACAGCTGGA AGAGGTACAA CATCCTGAAT CAGGAGCAGC    900
CCCTGGCCCA GCCAGCCTCA GGTCAGCCTG TCTCCCTGAA GAATATCTCC ACAGACACAT    960
CGGGTTACTA CATCTGTACC TCCAGCAATG AGGAGGGGAC GCAGTTCTGC AACATCACGG   1020
TGGCCGTCAG ATCTCCCTCC ATGAACGTGG CCCTGTATGT GGGGCATCGCG GTGGGCGTGG   1080
TTGCAGCCCT CATTATCATT GGCATCATCA TCTACTGCTG CTGCTGCCGA GGGAAGGACG   1140
ACAACACTGA AGACAAGGAG GATGCAAGGC CGAACCGGGA AGCCTATGAG GAGCCACCAG   1200
AGCAGCTAAG AGAACTTTCC AGAGAGAGGG AGGAGGAGGA TGACTACAGG CAAGAAGAGC   1260
AGAGGAGCAC TGGGCGTGAA TCCCCGGACC ACCTCGACCA GTGACAGGCC AGCAGCAGAG   1320
GGCGGCGGAG GAAGGGTTAG GGGTTCATTC TCCCGCTTCC TGGCCTCCCT TCTCCTTTCT   1380
AAGCCCTGTT CTCCTGTCCC TCCATCCCAG ACATTGATGG GGACATTTCT TCCCCAGTGT   1440
CAGCTGTGGG GAACATGGCT GGCCTGGTAA GGGGGTCCCT GTGCTGATCC TGCTGACCTC   1500
ACTGTCCTGT GAAGTAACCC CTCCTGGCTG TGACACCTGG TGCGGGCCTG GCCCTCACTC   1560
AAGACCAGGC TGCAGCCTCC ACTTCCCTCG TAGTTGGCAG GAGCTCCTGG AAGCACAGCG   1620
CTGAGCATGG GGCGCTCCCA CTCAGAACTC TCCAGGGAGG CGATGCCAGC CTTGGGGGGT   1680
GGGGGCTGTC CTGCTCACCT GTGTGCCCAG CACCTGGAGG GGCACCAGGT GGAGGGTTTG   1740
CACTCCACAC ATCTTTCTTG AATGAATGAA AGAATAAGTG AGTATGCTTG GGCCCTGCAT   1800
TGGCCTGGCC TCCAGCTCCC ACTCCCTTTC CAACCTCACT TCCCGTAGCT GCCAGTATGT   1860
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GCCCACACAC TTTCCATCTC TGCCTGTCAA TATCGTACCT GTCCCTCCAG GCCCATCTCA   1980
AATCACAAGG ATTTCTCTAA CCCTATCCTA ATTGTCCACA TACGTGGAAA CAATCCTGTT   2040
ACTCTGTCCC ACGTCCAATC ATGGGCCACA AGGCACAGTC TTCTGAGCGA GTGCTCTCAC   2100
TGTATTAGAG CGCCAGCTCC TTGGGGCAGG GCCTGGGCCT CATGGCTTTT GCTTTCCCTG   2160
AAGCCCTAGT AGCTGGCGCC CATCCTAGTG GGCACTTAAG CTTAATTGGG GAAACTGCTT   2220
TGATTGGTTG TGCCTTCCCT TCTCTGGTCT CCTTGAGATG ATCGTAGACA CAGGGATGAT   2280
TCCCACCCAA ACCCACGTAT TCATTCAGTG AGTTAAACAC GAATTGATTT AAAGTGAACA   2340
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GGCCAGAATA ATTGGCATGT CTCCTCAACC CACATGGGGT TCCTGGTTGT TCCTGCATCC   2460
CGATACCTCA GCCCTGGCCC TGCCCAGCCC ATTTGGGCTC TGGTTTTCTG GTGGGGCTGT   2520
CCTGCTGCCC TCCCACAGCC TCCTTCTGTT TGTCGAGCAT TTCTTCTACT CTTGAGAGCT   2580
CAGGCAGCGT TAGGGCTGCT TAGGTCTCAT GGACCAGTGG CTGGTCTCAC CCAACTGCAG   2640
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TTGCGATTTT TTAAAAAATG TATATTTTTA TATATATTGT TAAATCCTTT GCTTCATTCC   2760
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Seq ID NO: C2 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..3150

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CGCCGACCCC CGCTSSTGCC GCTGCTGTTG CTGCTSSTGC CGCCGCCACC CAGGGTCGGG    120
GGCTTCAACT TAGACGCGGA GGCCCCAGCA GTACTCTCGG GGCCCCCGGG CTCCTTCTTC    180
GGATTCTCAG TGGAGTTTTA CCGGCCGGGA ACAGACGGGG TCAGTGTGCT GGTGGGAGCA    240
CCCAAGGCTA ATACCAGCCA GCCAGGAGTG CTGCAGGGTG GTGCTGTCTA CCTCTGTCGT    300
TGGGGTGCCA GCCCCACACA GTGCACCCCC ATTGAATTTG ACAGCAAAGG CTCTCGGCTC    360
CTGGAGTCCT CACTGTCCAG CTCAGAGGGA GAGGAGCCTG TGGAGTACAA GTCCTTGCAG    420
TGGTTCGGGG CAACAGTTCG AGCCCATGGC TCCTCCATCT TGCCACTGTAC TCCACTGTAC    480
AGCTGGCGCA CAGAGAAGGA GCCACTGAGC GACCCCGTGG GCACCTGCTA CCTCTCCACA    540
GATAACTTCA CCCGAATTCT GGAGTATGCA CCCTGCCGCT CAGATTCAG CTGGGCAGCA     600
GGACAGGGTT ACTGCCAAGG AGGCTTCAGT GCCGAGTTCA CAAGACTGG CCGTGTGGTT     660
TTAGGTGGAC CAGGAAGCTA TTTCTGGCAA GGCCAGATCC TGTCTGCCAC TCAGGAGCAG    720
ATTGCAGAAT CTTATTACCC CGAGTACCTG ATCAACCTGG TTCAGGGGCA GCTGCAGACT    780
CGCCAGGCCA GTTCCATCTA TGATGACAGC TACCTAGGAT ACTCTGTGGC TGTTGGTGAA    840
TTCAGTGGTG ATGACACAGA AGACTTTGTT GCTGGTGTGC CCAAAGGGAA CCTCACTTAC    900
GGCTATGTCA CCATCCTTAA TGGCTCAGAC ATTCGATCCC TCTACAACTT CTCAGGGGAA    960
CAGATGGCCT CCTACTTTGG CTATGCAGTG GCCGCCACAG ACGTCAATGG GGACGGGCTG   1020
GATGACTTGC TGGTGGGGGC ACCCCTGCTC ATGGATCGGA CCCCTGACGG GCGGCCTCAG   1080
GAGGTGGGCA GGGTCTACGT CTACCTGCAG CACCCAGCCG GCATAGAGCC CACGCCCACC   1140
CTTACCCTCA CTGGCCATGA TGAGTTTGGC CGATTTGGCA GCTCCTTGAC CCCCCTGGGG   1200
GACCTGGACC AGGATGGCTA CAATGATGTG GCCATCGGGG CTCCCTTTGG TGGGGAGACC   1260
CAGCAGGGAG TAGTGTTTGT ATTTCCTGGG GGCCCAGGAG GGCTGGGCTC TAAGCCTTCC   1320
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CGAGGAGGCC GAGACCTGGA TGGCAATGGA TATCCTGATC TGATTGTGGG GTCCTTTGGT  1440
GTGGACAAGG CTGTGGTATA CAGGGGCCGC CCCATCGTGT CCGCTAGTGC CTCCCTCACC  1500
ATCTTCCCCG CCATGTTCAA CCCAGAGGAG CGGAGCTGCA GCTTAGAGGG GAACCCTGTG  1560
GCCTGCATCA ACCTTAGCTT CTGCCTCAAT GCTTCTGGAA AACACGTTGC TGACTCCATT  1620
GGTTTCACAG TGGAACTTCA GCTGGACTGG CAGAAGCAGA AGGGAGGGGT ACGGCGGGCA  1680
CTGTTCCTGG CCTCCAGGCA GGCAACCCTG ACCCAGACCC TGCTCATCCA GAATGGGGCT  1740
CGAGAGGATT GCAGAGAGAT GAAGATCTAC CTCAGGAACG AGTCAGAATT TCGAGACAAA  1800
CTCTCGCCGA TTCACATCGC TCTCAACTTC TCCTTGGCAC CCCAAGCCCC AGTGGACAGC  1860
CACGGCCTCA GGCCAGCCCT ACATTATCAG AGCAAGAGCC GGATAGAGGA CAAGGCTCAG  1920
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GGGGAGCAGA ACCATGTGTA CCTGGGTGAC AAGAATGCCC TGAACCTCAC TTTCCATGCC  2040
CAGAATGTGG GTGAGGGTGG CGCCTATGAC GCTGAGCTTC GGGTCACCGC CCCTCCAGAG  2100
GCTGAGTACT CAGGACTCGT CAGACACCCA GGGAACTTCT CCAGCCTGAG CTGTGACTAC  2160
TTTGCCGTGA ACCAGAGCCG CCTGCTGGTG TGTGACCTGG GCAACCCCAT GAAGGCAGGA  2220
GCCAGTCTGT GGGGTGGCCT TCGGTTTACA GTCCCTCATC TCCGGGACAC TAAGAAAACC  2280
ATCCAGTTTG ACTTCCAGAT CCTCAGCAAG AATCTCAACA ACTCGCAAAG CGACGTGGTT  2340
TCCTTTCGGC TCTCCGTGGA GGCTCAGGCC CAGGTCACCC TGAACGGTGT CTCCAAGCCT  2400
GAGGCAGTGC TATTCCCAGT AAGCGACTGG CATCCCCGAG ACCAGCCTCA GAAGGAGGAG  2460
GACCTGGGAC CTGCTGTCCA CCATGTCTAT GAGCTCATCA ACCAAGGCCC CAGCTCCATT  2520
AGCCAGGGTG TGCTGGAACT CAGCTGTCCC CAGGCTCTGG AAGGTCAGCA GCTCCTATAT  2580
GTGACCAGAG TTACGGGACT CAACTGCACC ACCAATCACC CCATTAACCC AAAGGGCCTG  2640
GAGTTGGATC CCGAGGGTTC CCTGCCACCAC CAGCAAAAAC GGGAAGCTCC AAGCCGCAGC  2700
TCTGCTTCCT CGGGACCTCA GATCCTGAAA TGCCCGGAGG CTGAGTGTTT CAGGCTGCGC  2760
TGTGAGCTCG GGCCCCTGCA CCAACAAGAG AGCCAAAGTC TGCAGTTGCA TTTCCGAGTC  2820
TGGGCCAAGA CTTTCTTGCA GCGGGAGCAC CAGCCATTTA GCCTGCAGTG TGAGGCTGTG  2880
TACAAAGCCC TGAAGATGCC CTACCGAATC CTGCCTCGGC AGCTGCCCCA AAAAGAGCGT  2940
CAGGTGGCCA CAGCTGTGCA ATGGACCAAG GCAGAAGGCA GCTATGGCGT CCCACTGTGG  3000
ATCATCATCC TAGCCATCCT GTTTGGCCTC CTGCTCCTAG GTCTACTCAT CTACACATCTC  3060
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Seq ID NO: C3 DNA Sequence
Nucleic Acid Accession #: NM_002421.2
Coding sequence: 1..1410

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CCAGCGACTC TAGAAACACA AGAGCAAGAT GTGGACTTAG TCCAGAAATA CCTGGAAAAA  120
TACTACAACC TGAAGAATGA TGGGAGGCAA GTTGAAAAGC GGAGAAATAG TGGCCCAGTG  180
GTTGAAAAAT TGAAGCAAAT GCAGGAATTC TTTGGGCTGA AAGTGACTGG GAAACCAGAT  240
GCTGAAACCC TGAAGGTGAT GAAGCAGCCC AGATGTGGAG TGCCTGATGT GGCTCAGTTT  300
GTCCTCACTG AGGGGAACCC TCGCTGGGAG CAAACACATC TGACCTACAG GATTGAAAAT  360
TACACGCCAG ATTTGCCAAG AGCAGATGTG GACCATGCCA TTGAGAAAGC CTTCCAACTC  420
TGGAGTAATG TCACACCTCT GACATTCACC AAGGTCTCTG AGGGTCAAGC AGACATCATG  480
ATATCTTTTG TCAGGGGAGA TCATCGGGAC AACTCTCCTT TTGATGGACC TGGAGGAAAT  540
CTTGCTCATG CTTTTCAACC AGGCCCAGGT ATTGGAGGGG ATGCTCATTT TGATGAAGAT  600
GAAAGGTGGA CCAACAATTT CAGAGAGTAC AACTTACATC GTGTTGCGGC TCATGAACTC  660
GGCCATTCTC TTGGACTCTC CCATTCTACT GATATCGGGG CTTTGATGTA CCCCTAGCTAC  720
ACCTTCAGTG GTGATGTTCA GCTAGCTCAG GATGACATTG ATGGCATCCA AGCCATATAT  780
GGACGTTCCC AAAATCCTGT CCAGCCCATC GGCCCACAAA CCCCAAAAGC ATGTGACAGT  840
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TTCTACATGC GACAAAATCC CTTCTACCCG GAAGTTGAGC TCAATTTCAT TTCTGTTTTC  960
TGGCCACAAC TGCCAAATGG GCTTGAAGCT GCTTACGAAT TTGCCGACAG AGATGAAGTC  1020
CGGTTTTTCA AAGGGAATAA GTACTGGGCT GTTCAGGGAC AGAATGTGCT ACACGGATAC  1080
CCCAAGGACA TCTACAGCTC CTTTGGCTTC CCTAGAACTG TGAAGCATAT CGATGCTGCT  1140
CTTTCTGAGG AAAACACTGG AAAAACCTAC TTCTTTGTTG CTAACAAATA CTGGAGGTAT  1200
GATGAATATA AACGATCTAT GGATCCAGGT TATCCCAAAA TGATAGCACA TGACTTTCCT  1260
GGAATTGGCC ACAAAGTTGA TGCAGTTTTC ATGAAAGATG GATTTTTCTA TTTCTTTCAT  1320
GGAACAAGAC AATACAAATT TGATCCTAAA ACGAAGAGAA TTTTGACTCT CCAGAAAGCT  1380
AATAGCTGGT TCAACTGCAG GAAAAATTAG                                  1410
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Seq ID NO: C4 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1410

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CCAGCGACTC TAGAAACACA AGAGCAAGAT GTGGACTTAG TCCAGAAATA CCTGGAAAAA  120
TACTACAACC TGAAGAATGA TGGGAGGCAA GTTGAAAAGC GGAGAAATAG TGGCCCAGTG  180
GTTGAAAAAT TGAAGCAAAT GCAGGAATTC TTTGGGCTGA AAGTGACTGG GAAACCAGAT  240
GCTGAAACCC TGAAGGTGAT GAAGCAGCCC AGATGTGGAG TGCCTGATGT GGCTCAGTTT  300
GTCCTCACTG AGGGGAACCC TCGCTGGGAG CAAACACATC TGACCTACAG GATTGAAAAT  360
TACACGCCAG ATTTGCCAAG AGCAGATGTG GACCATGCCA TTGAGAAAGC CTTCCAACTC  420
TGGAGTAATG TCACACCTCT GACATTCACC AAGGTCTCTG AGGGTCAAGC AGACATCATG  480
ATATCTTTTG TCAGGGGAGA TCATCGGGAC AACTCTCCTT TTGATGGACC TGGAGGAAAT  540
CTTGCTCATG CTTTTCAACC AGGCCCAGGT ATTGGAGGGG ATGCTCATTT TGATGAAGAT  600
GAAAGGTGGA CCAACAATTT CAGAGAGTAC AACTTACATC GTGTTGCGGC TCATGAACTC  660
GGCCATTCTC TTGGACTCTC CCATTCTACT GATATCGGGG CTTTGATGTA CCCCTAGCTAC  720
ACCTTCAGTG GTGATGTTCA GCTAGCTCAG GATGACATTG ATGGCATCCA AGCCATATAT  780
GGACGTTCCC AAAATCCTGT CCAGCCCATC GGCCCACAAA CCCCAAAAGC ATGTGACAGT  840
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GATGAATATA AACGATCTAT GGATCCAGGT TATCCCAAAA TGATAGCACA TGACTTTCCT   1260
GGAATTGGCC ACAAAGTTGA TGCAGTTTTC ATGAAAGATG GATTTTTCTA TTTCTTTCAT   1320
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Seq ID NO: C5 DNA Sequence
Nucleic Acid Accession #: NM_014331.2
Coding sequence: 1..1506

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GGAATCTTCA TCTCTCCTAA GGGCGTGCTC CAGAACACGG GCAGCGTGGG CATGTCTCTG   240
ACCATCTGGA CGGTGTGTGG GGTCCTGTCA CTATTTGGAG CTTTGTCTTA TGCTGAATTG   300
GGAACAACTA TAAAGAAATC TGGAGGTCAT TACACATATA TTTTGGAAGT CTTTGGTCCA   360
TTACCAGCTT TTGTACGAGT CTGGGTGGAA CTCCTCATAA TGCCCCTGC AGCTACTGCT   420
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CCTGAACTTG CGATCAAGCT CATTACAGCT GTGGGCATAA CTGTAGTGAT GGTCCTAAAT   540
AGCATGAGTG TCAGCTGGAG CGGCCGGATC CAGATTTTCT TAACCTTTTG CAAGCTCACA   600
GCAATTCTGA TAATTATAGT CCCTGGAGTT ATGCAGCTAA TTAAAGGTCA AACGCAGAAC   660
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TATGGAATGT ATGCATATGC TGGCTGGTTT TACCTCAACT TTGTTACTGA AGAAGTAGAA   780
AACCCTGAAA AAACCATTCC CCTTGCAATA TGTATATCCA TGGCCATTGT CACCATTGGC   840
TATGTGCTGA CAAATGTGGC CTACTTTACG ACCATTAATG CTGAGGAGCT GCTGCTTTCA   900
AATGCAGTGG CAGTGACCTT TTCTGAGCGG CTACTGGGAA ATTTCTCATT AGCAGTTCCG   960
ATCTTTGTTG CCCTCTCCTG CTTTGGCTCC ATGAACGGTG GTGTGTTTGC TGTCTCCAGG   1020
TTATTCTATG TTGCGTCTCG AGAGGGTCAC CTTCCAGAAA TCCTCTCCAT GATTCATGTC   1080
CGCAAGCACA CTCCTCTACC AGCTGTTATT GTTTTGCACC CTTGACAAT GATAATGCTC   1140
TTCTCTGGAG ACCTCGACAG TCTTTTGAAT TTCCTCAGTT TTGCCAGGTG GCTTTTTATT   1200
GGGCTGGCAG TTGCTGGGCT GATTTATCTT CGATACAAAT GCCCAGATAT GCATCGTCCT   1260
TTCAAGGTGC CACTGTTCAT CCCAGCTTTG TTTTCCTTCA CATGCCTCTT CATGGTTGCC   1320
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GTCCCTGCGT ATTATCTCTT TATTATATGG GACAAGAAAC CCAGGTGGTT TAGAATAATG   1440
TCAGAGAAAA TAACCAGAAC ATTACAAATA ATACTGGAAG TTGTACCAGA AGAAGATAAG   1500
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TCTCTACAAC ATATGTTAGC ACGGCAAAGA ACCTTCAAAT TGAAGACTGA GATTTTTCTG   1860
TATATATGGG TTTTGTAAAG ATGGTTTTAC ACACTACAGA TGTCTATACT GTGAAAAGTG   1920
TTTTCAATTC TGAAAAAAAG CATACATCAT GATTATGGCA AAGAGGAGAG AAAGAAATTT   1980
ATTTTACATT GACATTGCAT TGCTTCCCCT TAGATACCAA TTTAGATAAC AAACACTCAT   2040
GCTTTAATGG ATTATACCCA GAGCACTTTG AACAAAGGTC AGTGGGGATT GTTGAATACA   2100
TTAAAGAAGA GTTTCTAGGG GCTACTGTTT ATGAGACACA TCCAGGAGTT ATGTTTAAGT   2160
AAAAATCCTT GAGAATTTAT TATGTCAGAT GTTTTTTCAT TCATTATCAG GAAGTTTTAG   2220
TTATCTGTCA TTTTTTTTTT TCACATCAGT TTGATCAGGA AAGTGTATAA CACATCTTAG   2280
AGCAAGAGTT AGTTTGGTAT TAAATCCTCA TTAGAACAAC CACCTGTTTC ACTAATAACT   2340
TACCCCTGAT GAGTCTATCT AAACATATGC ATTTTAAGCC TTCAAATTAC ATTATCAACA   2400
TGAGAGAAAT AACCAACAAA GAAGATGTTC AAAATAATAG TCCCATATCT GTAATCATAT   2460
CTACATGCAA TGTTAGTAAT TCTGAAGTTT TTTAAATTTA TGGCTATTTT TACACGATGA   2520
TGAATTTTGA CAGTTTGTGC ATTTTCTTTA TACATTTTAT ATTCTTCTGT TAAAATATCT   2580
CTTCAGATGA AACTGTCCAG ATTAATTAGG AAAAGGCATA TATTAACATA AAAATTGCAA   2640
AAGAAATGTC GCTGTAAATA AGATTTACAA CTGATGTTTC TAGAAAATTT CCACTTCTAT   2700
ATCTAGGCTT TGTCAGTAAT TTCCACACCT TAATTATCAT TCAACTTGCA AAAGAGACAA   2760
CTGATAAGAA GAAAATTGAA ATGAGAATCT GTGGATAAGT GTTTGTGTTC AGAAGATGTT   2820
GTTTTGCCAG TATTAGAAAA TACTGTGAGC CGGGCATGGT GGCTTACATC TGTAATCCCA   2880
GCACTTTGGG AGGCTGAGGG GGTGGATCAC CTGAGGTCGG GAGTTCTAGA CCAGCCTGAC   2940
CAACATGGAG AAACCCCATC TCTACTAAAA ATACAAAATT AGCTGGGCAT GGTGGCACAT   3000
GCTGGTAATC TCAGCTATTG AGGAGGCTGA GGCAGGAGAA TTGCTTGAAC CCGGGAGGCG   3060
GAGGTTGCAG TGAGCCAAGA TTGCACCACT GTACTCCAGC CTGGGTGACA AAGTCAGACT   3120
CCATCTCCAA AAAAAAAAAA AAAA                                         3144
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Seq ID NO: C6 DNA Sequence
Nucleic Acid Accession #: NM_003246.1
Coding sequence: 112..3624

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CGCCGCGCTC CGGTACACAC AGGATCCCTG CTGGGCACCA ACAGCTCCAC CATGGGGCTG   120
GCCTGGGGAC TAGGCGTCCT GTTCCTGATG CATGTGTGTG GCACCAACCG CATTCCAGAG   180
TCTGGCGGAG ACAACAGCGT GTTTGACATC TTTGAACTCA CCGGGGCCGC CCGCAAGGGG   240
TCTGGGCGCC GACTGGTGAA GGGCCCCGAC CCTTCCAGCC CAGCTTCCG CATCGAGGAT   300
GCCAACCTGA TCCCCCCTGT GCCTGATGAC AAGTTCCAAG ACCTGGTGGA TGCTGTGCGG   360
GCAGAAAAGG GTTTCCTCCT TCTGGCATCC CTGAGGCAGA TGAAGAAGAC CCGGGGCACG   420
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      CTGCTGGCCC TGGAGCGGAA AGACCACTCT GGCCAGGTCT TCAGCGTGGT GTCCAATGGC    480
      AAGGCGGGCA CCCTGGACCT CAGCCTGACC GTCCAAGGAA AGCAGCACGT GGTGTGTCTGTG    540
      GAAGAAGCTC TCCTGGCAAC CGGCCAGTGG AAGAGCATCA CCCTGTTTGT GCAGGAAGAC    600
      AGGGCCCAGC TGTACATCGA CTGTGAAAAG ATGGAGAATG CTGAGTTGGA CGTCCCCATC    660
5     CAAAGCGTCT TCACCAGAGA CCTGGCCAGC ATCGCCAGAC TCCGCATCGC AAAGGGGGGC    720
      GTCAATGACA ATTTCCAGGG GGTGCTGCAG AATGTGAGGT TTGTCTTTGG AACCACACCA    780
      GAAGACATCC TCAGGAACAA AGGCTGCTCC AGCTCTACCA GTGTCCTCCT CACCCCTTGAC    840
      AACAACGTGG TGAATGGTTC CAGCCCTGCC ATCCGCACTA ACTACATTGG CCACAAGACA    900
      AAGGACTTGC AAGCCATCTG CGGCATCTCC TGTGATGAGC TGTCCAGCAT GGTCCTGGAA    960
10    CTCAGGGGCC TGCGCACCAT TGTGACCACG CTGCAGGACA GCATCCGCAA AGTGACTGAA   1020
      GAGAACAAAG AGTTGGCCAA TGAGCTGAGG CGGCCTCCCC TATGCTATCA CAACGGAGTT   1080
      CAGTACGAAA ATAACGAGGA ATGGACTGTT GATAGCTGCA CTGAGTGTCA CTGTCAGAAC   1140
      TCAGTTACCA TCTGCAAAAA GGTGTCCTGC CCCATCATGC CCTGCTCCAA TGCCACAGTT   1200
      CCTGATGGAG AATGCTGTCC TCGCTGTTGG CCCAGCGACT CTGCGGACGA TGGCTGGTCT   1260
15    CCATGGTCCG AGTGGACCTC CTGTTCTACG AGCTGTGGCA ATGGAATTCA GCAGCGCGGC   1320
      CGCTCCTGCG ATAGCCTCAA CAACCGATGT CAGGGCTCCT CGGTCCAGAC ACGGACCTGC   1380
      CACATTCAGG AGTGTGACAA AAGATTTAAA CAGGATGGTG GCTGGAGCCA CTGGTCCCCG   1440
      TGGTCATCTT GTTCTGTGAC ATGTGGTGAT GGTGTGATCA CAAGGATCCG GCTCTGCAAC   1500
      TCTCCCAGCC CCCAGATGAA TGGGAAACCC TGTGAAGGCG AAGCGCGGGA GACCAAAGCC   1560
20    TGCAAGAAAG ACGCCTGCCC CATCAATGGA GGCTGGGGTC CTTGGTCACC ATGGGACATC   1620
      TGTTCTGTCA CCTGTGGAGG AGGGGTACAG AAACGTAGTC GTCTCTGCAA CAACCCCGCA   1680
      CCCCAGTTTG GAGGCAAGGA CTGCGTTGGT GATGTAACAG AAAACCAGAT CTGCAACAAG   1740
      CAGGACTGTC CAATTGATGG ATGCCTGTCT AATCCCTGCT TTGCCGGCGT GAAGTGTACT   1800
      AGCTACCCTG ATGGCAGCTG GAAATGTGGT GCTTGTCCCC CTGGTTACAG TGGAAATGGC   1860
25    ATCCAGTGCA CAGATGTTGA TGAGTGCAAA GAAGTGCCTG ATGCCTGCTT CAACCCACAAT   1920
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      TTCACCGGCT CACAGCCCTT CGGCCAGGGT GTCGAACATG CCACGGCCAA CAAACAGGTG   2040
      TGCAAGCCCC GTAACCCCTG CACGGATGGG ACCCACGACT GCAACAAGAA CGCCAAGTGC   2100
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30    GGCAATGGCA TCATCTGCGG GGAGGACACA GACCTGGATG GCTGGCCCAA TGAGAACCTG   2220
      GTGTGCGTGG CCAATGCGAC TTACCACTGC AAAAAGGATA ATTGCCCCAA CCTTCCCAAC   2280
      TCAGGGCAGG AAGACTATGA CAAGGATGGA ATTGGTGATG CCTGTGATGA TGACGATGAC   2340
      AATGATAAAA TTCCAGATGA CAGGGACAAC TGTCCATTCC ATTACAACCC AGCTCAGTAT   2400
      GACTATGACA GAGATGATGT GGGAGACCGC TGTGACAACT GTCCCTACAA CCACAACCCA   2460
35    GATCAGGCAG ACACAGACAA CAATGGGGAA GGAGACGCCT GTGCTGCAGA CATTGATGGA   2520
      GACGGTATCC TCAATGAACG GGACAACTGC CAGTACGTCT ACAATGTGGA CCAGAGAGAC   2580
      ACTGATATGG ATGGGGTTGG AGATCAGTGT GACAATTGCC CCTTGGAACA CAATCCGGAT   2640
      CAGCTGGACT CTGACTCAGA CCGCATTGGA GATACCTGTG ACAACAATCA GGATATTGAT   2700
      GAAGATGGCC ACCAGAACAA TCTGGACAAC TGTCCCTATG TGCCCAATGC CAACCAGGCT   2760
40    GACCATGACA AAGATGGCAA GGGAGATGCC TGTGACCACG ATGATGACAA CGATGGCATT   2820
      CCTGATGACA AGGACAACTG CAGACTCGTG CCCAATCCCG ACCAGAAGGA CTCTGACGGC   2880
      GATGGTCGAG GTGATGCCTG CAAAGATGAT TTTGACCATG ACAGTGTGCC AGACATCGAT   2940
      GACATCGTC CTGAGAATGT TGACATCAGT GAGACCGATT CCGCCGATT CCAGATGATT   3000
45    CCTCTGGACC CCAAAGGGAC ATCCCAAAAT GACCCTAACT GGGTTGTACG CCATCAGGGT   3060
      AAAGAACTCG TCCAGACTGT CAACTGTGAT CCTGGACTCG CTGTAGGTTA TGATGAGTTT   3120
      AATGCTGTGA ACTTCAGTGG CACCTTCTTC ATCAACACCG AAAGGGACGA TGACTATGCT   3180
      GGATTTGTCT TTGGCTACCA GTCCAGCAGC CGCTTTTATG TTGTGATGTG GAAGCAAGTC   3240
      ACCCAGTCCT ACTGGGACAC CAACCCCACG AGGGCTCAGG GATACTCGGG CCTTTCTGTG   3300
50    AAAGTTGTAA ACTCCACCAC AGGGGCCTGG C GAGCACCTGC GGAACGCCCT GTGGCACACA   3360
      GGAAACACCC CTGGCCAGGT GCGCACCCTG TGGCATGACC CTCGTCACAT AGGCTGGAAA   3420
      GATTTCACCG CCTACAGATG CGGTCTCAGC CACAGGCCAA AGACGGGTTT CATTAGAGTG   3480
      GTGATGTATG AAGGGAAGAA AATCATGGCT GACTCAGGAC CCATCTATGA TAAAACCTAT   3540
55    GCTGGTGGTA GACTAGGGTT GTTTGTCTTC TCTCAAGAAA TGGTGTTCTT CTCTGACCTG   3600
      AAATACGAAT GTAGAGATCC CTAATCATCA AATTGTTGAT TGAAAGACTG ATCATAAACC   3660
      AATGCTGGTA TTGCACCTTC TGGAACTATG GGCTTGAGAA AACCCCCAGG ATCACTTCTC   3720
      CTTGGCTTCC TTCTTTTCTG TGCTTGCATC AGTGTGGACT CCTAGAACGT GCGACCTGCC   3780
      TCAAGAAAAT GCAGTTTTCA AAAACAGACT CATCAGCATT CAGCCTCCAA TGAATAAGAC   3840
      ATCTTCCAAG CATATAAACA ATTGCTTTGG TTTCCTTTTG AAAAAGCATC TACTTGCTTC   3900
      AGTTGGGAAG GTGCCCATTC CACTCTGCCT TTGTCACAGA GCAGGGTGCT ATTGTGAGGC   3960
60    CATCTCT                                                              3967
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Seq ID NO: C7 DNA Sequence
Nucleic Acid Accession #: NM_002192
Coding sequence: 86..1366

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      AATCACAACA ACTTTTGCTG CCAGGATGCC CTTGCTTTGG CTGAGAGGAT TTCTGTTGGC   120
70    AAGTTGCTGG ATTATAGTGA GGAGTTCCCC CACCCCAGGA TCCGAGGGGC ACAGCGCGGC   180
      CCCCGACTGT CCGTCCTGTG CGCTGGCCGC CCTCCCAAAG GATGTACCCA ACTCTCAGCC   240
      AGAGATGGTG GAGGCCGTCA AGAAGCACAT TTTAAACATG CTGCACTTGA AGAAGAGACC   300
      CGATGTCACC CAGCCGGTAC CCAAGGCGGC GCTTCTGAAC GCGATCAGAA AGCTTCATGT   360
      GGGCAAAGTC GGGGAGAACG GGTATGTGGA GATAGAGGAT GACATTGGAA GGAGGGCAGA   420
75    AATGAATGAA CTTATGGAGC AGACCTCGGA GATCATCACG TTTGCCGAGT CAGGAACAGC   480
      CAGGAAGACG CTGCACTTCG AGATTTCCAA GGAAGGCAGT GACCTGTCAG TGGTGGAGCG   540
      TGCAGAAGTC TGGCTCTTCC TAAAAGTCCC CAAGGCCAAC AGGACCAGGA CCAAAGTCAC   600
      CATCCGCCTC TTCAGCAGC AGAAGCACCC GCAGGGCAGC TTGGACACAG GGAAGAGGGC   660
80    CGAGGAAGTG GGCTTAAAGG GGGAGAGGAG TGAACTGTTG CTCTCTGAAA AAGTAGTAGA   720
      CGCTCGGAAG AGCACCTGGC ATGTCTTCCC TGTCTCCAGC AGCATCCGAC GGTTGCTGGA   780
      CCAGGGCAAG AGCTCCCTGG ACGTTCGGAT TGCCTGTGAG CAGTGCCAGG AGAGTGGCGC   840
      CAGCTTGGTT CTCCTGGGCA AGAAGAAGAA GAAAGAAGAG GAGGGGGAAG GGAAAAAGAA   900
      GGGCGGAGGT GAAGGTGGGG CAGGAGCAGA TGAGGAAAAG GAGCAGTCGC ACAGACCTTT   960
      CCTCATGCTG CAGGCCCGGC AGTCTGAAGA CCACCCTCAT CGCCGGCGTC GGCGGGGCTT  1020
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1201

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TGAGTGCCCG AGCCATATAG CAGGCACGTC CGGGTCCTCA CTGTCCTTCC ACTCAACAGT   1200
CATCAACCAC TACCGCATGC GGGGCCATAG CCCCTTTGCC AACCTCAAAT CGTGCTGTGT   1260
GCCCACCAAG CTGAGACCCA TGTCCATGTT GTACTATGAT GATGGTCAAA ACATCATCAA   1320
AAAGGACATT CAGAACATGA TCGTGGAGGA GTGTGGGTGC TCATAGAGTT GCCCAGCCCA   1380
GGGGGAAAGG GAGCAAGAGT TGTCCAGAGA AGACAGTGGC AAAATGAAGA AATTTTTAAG   1440
GTTTCTGAGT TAACCAGAAA AATAGAAATT AAAAACAAAA CAAAACAAAA AAAAAAACAA   1500
AAAAAAACAA AAGTAAATTA AAAACAAACC TGATGAAACA GATGAAACAG ATGAAGGAAG   1560
ATGTGGAAAT CTTAGCCTGC CTTAGCCAGG GCTCAGAGAT GAAGCAGTGA AGAGACAGAT   1620
TGGGAGGGAA AGGGAGAATG GTGTACCCTT TATTTCTTCT GAAATCACAC TGATGACATC   1680
AGTTGTTTAA ACGGGGTATT GTCCTTTCCC CCCTTGAGGT TCCCTTGTGA GCTTGAATCA   1740
ACCAATCTGA TCTGCAGTAG TGTGGACTAG AACAACCCAA ATAGCATCTA GAAAGCCATG   1800
AGTTTGAAAG GGCCCATCAC AGGCACTTTC CTAGCCTAAT                          1840
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Seq ID NO: C8 DNA Sequence
Nucleic Acid Accession #: NM_000095.1
Coding sequence: 26..2299

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CCTGGCTGCC CTCGGCGCGT CCGGACAGGG CCAGAGCCCG TTGGGCTCAG ACCTGGGCCC   120
GCAGATGCTT CGGGAACTGC AGGAAACCAA CGCGGCGCTG CAGGACGTGC GGGACTGGCT   180
GCGGCAGCAG GTCAGGGAGA TCACGTTCCT GAAAAACACG GTGATGGAGT GTGACGCGTG   240
CGGGATGCAG CAGTCAGTAC GCACCGGCCT ACCCAGCGTG CGGCCCCTGC TCCACTGCGC   300
GCCCGGCTTC TGCTTCCCCG GCGTGGCCTG CATCCAGACG GAGAGCGGCG GCCGCTGCGG   360
CCCCTGCCCC GCGGGCTTCA CGGGCAACGG CTCGCACTGC ACCGACGTCA ACGAGTGCAA   420
CGCCCACCCC TGCTTCCCCC GAGTCCGCTG TATCAACACC AGCCCGGGGT TCCGCTGCGA   480
GGCTTGCCCG CCGGGGTACA GCGGCCCCAC CCACCAGGGC GTGGGGCTGG CTTTCGCCAA   540
GGCCAACAAG CAGGTTTGCA CGGACATCAA CGAGTGTGAG ACCGGGCAAC ATAACTGCGT   600
CCCCAACTCC GTGTGCATCA ACACCCGGGG CTCCTTCCAG TGCGGCCCGT GCCAGCCCGG   660
CTTCGTGGGC GACCAGGCGT CCGGCTGCCA GCGCGGCGCA CAGCGCTTCT GCCCCGACGG   720
CTCGCCCAGC GAGTGCCACG AGCATGGCAGA CTGCGTCCTA GAGCGCGATG GCTCGCGGTC   780
GTGCGTGTGT CGCGTTGGCT GGGCCGGCAA CGGGATCCTC TGTGGTCGCG ACACTGACCT   840
AGACGGCTTC CCGGACGAGA AGCTGCGCTG CCCGGAGCCG CAGTGCCGTA AGGACAACTG   900
CGTGACTGTG CCCAACTCAG GGCAGGAGGA TGTGGACCGC GATGGCATCG GAGACGCCTG   960
CGGATCCGGAT GCCGACGGGG ACGGGGTCCC CAATGAAAAG GACAACTGCC CGCTGGTGCG   1020
GAACCCAGAC CAGCGCCAACA CGGACGAGGA CAAGTGGGGC GATGCGTGCG ACAACTGCCG   1080
GTCCCAGAAG AACGACGACC AAAAGGACAC AGACCAGGAC GGCCGGGGGG ATGCGTGCGA   1140
CGACGACATC GACGGCGACC GGATCCGCAA CCAGGCCGAC AACTGCCCTA GGGTACCCAA   1200
CTCAGACCAG AAGGACAGTG ATGGCGATGG TATAGGGGAT GCCTGTGACA ACTGTCCCCA   1260
GAAGAGCAAC CCGGATCAGG CGGATGTGGA CCACGACTTT GTGGGAGATG CTTGTGACAG   1320
CGATCAAGAC CAGGATGGAG ACGGACATCA GGACTCTCGG GACAACTGTC CACGGTGCC   1380
TAACAGTGCC CAGGAGGACT CAGACCACGA TGGCCAGGGT GATGCCTGCG ACGACGACGA   1440
CGACAATGAC GGAGTCCCTG ACAGTCGGGA CAACTGCCGC CTGGTGCCTA ACCCCGGCCA   1500
GGAGGACGCG GACAGGGACG GCGTGGGCGA CGTGTGCCAG GACGACTTTG ATGCAGACAA   1560
GGTGGTAGAC AAGATCGACG TGTGTCCGGA GAACGCTGAA GTCACGCTCA CCGACTTCAG   1620
GGCCTTCCAG ACAGTCGTGC TGGACCCGGA GGGTGACGCG CAGATTGACC CCAACTGGGT   1680
GGTGCTCAAC CAGGGAAGGG AGATCGTGCA GACAATGAAC AGCGACCCAG GCCTGGCTGT   1740
GGGTTACACT GCCTTCAATG GCGTGGACTT CGAGGGCACG TTCCATGTGA CACGGTCAC   1800
GGATGACGAC TATGCGGGCT TCATCTTTGG CTACCAGGAC AGCTCCAGCT TCTACGTGGT   1860
CATGTGGAAG CAGATGGAGC AAACGTATTG GCAGGCGAAC CCCTTCCGTG CTGTGGCCGA   1920
GCCTGGCATC CAACTCAAGG CTGTGAAGTC TTCCACAGGC CCCGGGGAAC AGCTGCGGAA   1980
CGCTCTGTGG CATACAGGAG ACACAGAGTC CCAGGTGCGG CTGCTGTGGA AGGACCCGCG   2040
AAACGTGGGT TGGAAGGACA AGAAGTCCTA TCGTTGGTTC CTGCAGCACC GGCCCCAAGT   2100
GGGCTACATC AGGGTGCGAT TCTATGAGGG CCCTGAGCTG GTGGCCGACA GCAACGTGGT   2160
CTTGACACA ACCATGCGGG GTGGCCGCCT GGGGGTCTTC TGCTTCTCCC AGGAGAACAT   2220
CATCTGGGCC AACCTGCGTT ACCGCTGCAA TGACACCATC CCAGAGGACT ATGAGACCCA   2280
TCAGCTGCGG CAAGCCTAGG GACCAGGGTG AGGACCCGCC GGATGACAGC CACCCTCACC   2340
GCGGCTGGAT GGGGGCTCTG CACCCAGCCC AAGGGGTGGC CGTCCTGAGG GGGAAGTGAG   2400
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Seq ID NO: C9 DNA Sequence
Nucleic Acid Accession #: XM_057014
Coding sequence: 143..874

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CGCGGCGGAG CCAGACGCTG ACCACGTTCC TCTCCTCGGT CTCCTCCGCC TCCAGCTCCG   120
CGCTGCCCGG CAGCCGGGAG CCATGCGACC CCAGGGCCCC GCCGCCTCCC CGCAGCGGCT   180
CCGCGGCCTC CTGCTGCTCC TGCTGCTGCA GCTGCCCGCG CCGTCGAGCG CCTCTGAGAT   240
CCCCAAGGGG AAGCAAAAGG CGCAGCTCCG GCAGAGGGAG GTGGTGGACC TGTATAATGG   300
AATGTGCTTA CAAGGGCCAG CAGGAGTGCC TGGTCGAGAC GGGAGCCCTG GGGCCAATGG   360
CATTCCGGGT ACACCTGGGA TCCCAGGTCG GGATGGATTC AAAGGAGAAA AGGGGGAATG   420
TCTGAGGGAA AGCTTTGAGG AGTCCTGGAC ACCCAACTAC AAGCAGTGTT CATGGAGTTC   480
ATTGAATTAT GGCATAGATC TTGGGAAAAT TGCGGAGTGT ACATTTACAA AGATGCGTTC   540
AAATAGTGCT CTAAGAGTTT TGTTCAGTGG CTCACTTCGG CTAAAATGCA GAAATGCATG   600
CTGTCAGCGT TGGTATTTCA CATTCAATGG AGCTGAATGT TCAGGACCTC TTCCCATTGA   660
AGCTATAATT TATTTGGACC AAGGAAGCCC TGAAATGAAT TCAACAATTA ATATTCATCG   720
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CACTTCTTCT GTGGAAGGAC TTTGTGAAGG AATTGGTGCT GGATTAGTGG ATGTTGCTAT   780
CTGGGTTGGC ACTTGTTCAG ATTACCCAAA AGGAGATGCT TCTACTGGAT GGAATTCAGT   840
TTCTCGCATC ATTATTGAAG AACTACCAAA ATAAATGCTT TAATTTTCAT TTGCTACCTC   900
TTTTTTTATT ATGCCTTGGA ATGGTTCACT TAAATGACAT TTTAAATAAG TTTATGTATA   960
CATCTGAATG AAAAGCAAAG CTAAATATGT TTACAGACCA AAGTGTGATT TCACACTGTT  1020
TTTAAATCTA GCATTATTCA TTTTGCTTCA ATCAAAAGTG GTTTCAATAT TTTTTTTAGT  1080
TGGTTAGAAT ACTTTCTTCA TAGTCACATT CTCTCAACCT ATAATTTGGA ATATTGTTGT  1140
GGTCTTTTGT TTTTTCTCTT AGTATAGCAT TTTTAAAAAA ATATAAAAGC TACCAATCTT  1200
TGTACAATTT GTAAATGTTA AGAATTTTTT TTATATCTGT TAAATAAAAA TTATTTCCAA  1260
CAACCTTAAA AAAAAAAAAA AAAA                                        1284
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Seq ID NO: C10 DNA Sequence
Nucleic Acid Accession #: NM_003225
Coding sequence: 41..295

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GGTGATCTGC GCCCTGGTCC TGGTGTCCAT GCTGGCCCTC GGCACCCTGG CCGAGGCCCA   120
GACAGAGACG TGTACAGTGG CCCCCCGTGA AAGACAGAAT TGTGGTTTTC CTGGTGTCAC   180
GCCCTCCCAG TGTGCAAATA AGGGCTGCTG TTTCGACGAC ACCGTTCGTG GGGTCCCCTG   240
GTGCTTCTAT CCTAATACCA TCGACGTCCC TCCAGAAGAG GAGTGTGAAT TTAGACACT   300
TCTGCAGGGA TCTGCCTGCA TCCTGACGGG GTGCCGTCCC ATTAGTCCCA   360
GAGCTCGGCT GCCACCTCCA CCGGACACCT CAGACACGCT TCTGCAGCTG TGCCTCGGCT   420
CACAACACAG ATTGACTGCT CTGACTTTGA CTACTCAAAA TTGGCCTAAA AATTAAAAGA   480
GATCGATATT AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA   540
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Seq ID NO: C11 DNA Sequence
Nucleic Acid Accession #: NM_015419.1
Coding sequence: 1..8487

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CCGCGAGTGG CGCTGGCCTG CCCGCATCCT TGTGCCTGCT ACGTCCCCAG CGAGGTCCAC   120
TGCACGTTCC GATCCCTGGC TTCCGTGCCC GCTGGCATTG CTAGACACGT GGAAAGAATC   180
AATTTGGGGT TTAATAGCAT ACAGGCCCTG TCAGAAACCT CATTTGCAGG ACTGACCAAG   240
TTGGAGCTAC TTATGATTCA CGGCAATGAG ATCCCAAGCA TCCCCGATGG AGCTTTAAGA   300
GACCTCAGCT CTCTTCAGGT TTTCAAGTTC AGCTACAACA AGCTGAGAGT GATCACAGGA   360
CAGACCCTCC AGGGTCTCTC TAACTTAATG AGGCTGCACA TTGACCACAA CAAGATCGAG   420
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AATCTCCTCC ACCAGCTGCA CCCCAGCACC TTCTCCACGT TCACATTTTT GGATTATTTC   540
AGACTCTCCA CCATAAGGCA CCTCTACTTA GCAGAGAACA TGGTTAGAAC TCTTCCTGCC   600
AGCATGCTTC GGAACATGCC GCTTCTGGAG AATCTTTACT TGCAGGGAAA TCCGTGGACC   660
TGCGATTGTG AGATGAGATG GTTTTTGGAA TGGGATGCAA AATCCAGAGG AATTCTGAAA   720
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GAGTCCCCTC TGAGACAGAA CAGGAGCAGG AGTATTGAGG AGGAGCAAGA ACAGGAAGAG   900
GATGGTGGCA GCCAGCTCAT CCTGGAGAAA TTCCAACTGC CCCAGTGGAG CATCTCTTTG   960
AATATGACCG ACGAGCACGG GAACATGGTG AACTTGGTCT GTGACATCAA GAAACCAATG  1020
GATGTGTACA AGATTCACTT GAACCAAACG GATCCTCCAG ATATTGACAT AAATGCAACA  1080
GTTGCCTTGG ACTTTGAGTG TCCAATGACC CGAGAAAACT ATGAAAAGCT ATGGAAATTG  1140
ATAGCATACT ACAGTGAAGT TCCCGTGAAG CTACACAGAG AGCTCATGTC CAGCAAAGAC  1200
CCCAGAGTCA GCTACCAGTA CAGGCAGGAT GCTGATGAGG AAGCTCTTTA CTACACAGGT  1260
GTGAGAGCCC AGATTCTTGC AGAACCAGAA TGGGTCATGC AGCCATCCAT AGATATCCAG  1320
CTGAACCGAC GTCAGAGTAC GGCCAAGAAG GTGCTACTTT CCTACTACAC CCAGTATTCT  1380
CAAACAATAT CCACCAAAGA TACAAGGCAG GCTCGGGGCA GAAGCTGGGT AATGATTGAG  1440
CCTAGTGGAG CTGTGCAAAG AGATCAGACT GTCCTGGAAG GGGGTCCATG CCAGTTGAGC  1500
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AGGATCAAGT CCATGGAGCC ATCTGACTCA GGCTTGTACC AGTGCATTGC TCAAGTGAGG  1680
GATGAAATGG ACCGCATGGT ATATAGGGTA CTTGTGCAGT CTCCCTCCAC TCAGCCAGCC  1740
GAGAAAGACA CAGTGACAAT TGGCAAGAAC CCAGGGGAGT CGGTGACATT GCCTTGCAAT  1800
GCTTTAGCAA TACCCGAAGC CCAACCTTAGC TGGATTCTTC CAAACAGAAG GATAATTAAT  1860
GATTTGCTA ACACATCACA TGTATACATG TTGCCAAATG GAACTCTTTC CATCCCAAAG  1920
GTCCAAGTCA GTGATAGTGG TTACTACAGA TGTGTGGCTG TCAACCAGCA AGGGGCAGAC  1980
CATTTTACGG TGGGAATCAC AGTGACCAAG AAAGGGTCTG GCTTGCCATC CAAAAGAGGC  2040
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       GACCCATCAG CCCCGTGCTC TCTGACTGAT GCACTGGATC ACTTCCAAGT GGACAGCCTG    4560
       GATGAAATCA TCCCCAATGA CCTGAAGAAG AGTGATCTGC CTCCCCAGCA TGCTCCCCGC    4620
  70   AACATCACCG TGGTGGCCGT GGAAGGTTGC CACTCATTTG TCATTGTGGA TTGGGACAAA    4680
       GCCACCCCAG GAGATTTGGT CACAGGTTAT TTGGTTTACA GTGCATCCTA TGAAGATTTC    4740
       ATCAGGAACA AGTTTTCCAC TCAAGCTCTA TCAGTAACTC ACTTGCCCAT TGAGAACCTA    4800
       AAGCCCAACA CGAGGTATTA TTTTAAAGTG CAAGCACAAA ATCCTCATGG CTACGGACCT    4860
  75   ATCAGCCCTT CGGTCTCATT TGTCACCGAA TCAGATAATC CTCTGCTTGT TGTGAGGCCC    4920
       CCAGGCGGTG AGCTATCTGG ATCCCATTCG CTTTCAAACA TGATCCCAGC TACACGGACT    4980
       GCCATGGACG GCAATATGTG AAGCGCACGT GGTATCGAAA GTTCGTGGGA GTTGTTCTTT    5040
       GTAATTCACT GAGGTATAAA ATCTACCTCA GTGACAACCT GAAAGATACA TTCTACAGCA    5100
       TTGGAGACAG CTGGGGAAGA GGTGAAGACC ATTGCCAATT TGTGGATTCA CACCTTGATG    5160
  80   GAAGAACAGG GCCTCAGTCC TATGTAGAAG CCCTCCCTAC TATTCAAGGC TACTATCGCC    5220
       AGTATCGTCA GGAGCCTGTC AGGTTTGGGA ACATCGGCTT CGGAACCCCC TACTACTATG    5280
       TGGGCTGGTA CGAGTGTGGG GTCTCCATCC CTGGAAAGTG GTAATCACAG GACCGTCATG    5340
       CTGCAAGCTT GCCCTGCCCA GCCCCACCAA CTAAGTCGCA CTAGGGGCTG TGAGCAAAGA    5400
       CAGCCAGCAT GCTCAGCCCC GCTGCCCTAG GTGCCAGGAA GGTCACAGAT GGACACTGGC    5460
       CATTCTGGTC ATCTCAGTCT GGAACTCAGT CCCACTTCTT GGCCTGGACA ATGAACAGGA    5520
       TTCAGTTTTG CTGTTAACTT TGCTTCTCTA CTTTTTTTTTG TTTGTTTGTA ATAGCACATC    5580
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1206

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        CCAGAGACAT CAGAAACCAG CAACTGATTC AGTGTGATTT CCCAGACTTT TTAGGCATGA    5640
        AATTCGGACA CTTCAGTATT TCCAGGAATA GCATATGCAC GCTGTTCTTG CTTCATGGAA    5700
5       TGCTACATGC TTTCTGTTTT TCTCATTTTG GATTTCTCCA AAACTAACTG AATTTAAGCT    5760
        TCAGGTCCCT TTGTATGCAG TAGAAAGGAA TTATTAAAAA CACCACCAAA GAAAATAAAT    5820
        ATATCCTACT TGAAATTTAC TCTATGGACT TACCCACTGC TAGAATAAAT GTATCAAATC    5880
        TTATTTGTAA ATTCTCAATT TTGATATATA TATGTATATA TGCATATACA TATCCACACT    5940
        TGTCTGCAAG AATATTGATT AAAATTGCTA AATTTGTACT TGTTCACCAA AAAAAAAAAA    6000
        AAAAAAA                                                              6007

10      Seq ID NO: C14 DNA Sequence
        Nucleic Acid Accession #: NM_003014
        Coding sequence: 238..1278

15      1          11         21         31         41         51
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        GGCGGGTTCG CGCCCCGAAG GCTGAGAGCT GGCGCTGCTC GTGCCCTGTG TGCCAGACGG    60
        CGGAGCTCCG CGGCCGGACC CCGCGGCCCC GCTTTGCTGC CGACTGGAGT TTGGGGGAAG    120
        AAACTCTCCT GCGCCCCAGA AGATTTCTTC CTCGGCGAAG GGACAGCGAA AGATGAGGGT    180
20      GGCAGGAAGA GAAGGCGCTT TCTGTCTGCC GGGGTCGCAG CGCGAGAGGG CAGTGCCATG    240
        TTCCTCTCCA TCCTAGTGGC GCTGTGCCTG TGGCTGCACC TGGCGCTGGG CGTGCGCGGC    300
        GCGCCCTGCG AGGCGGTGCG CATCCCTATG TGCCGGCACA TGCCCTGGAA CATCACGCGG    360
        ATGCCCAACC ACCTGCACCA CAGCACGCAG GAGAACGCCA TCCTGGCCAT CGAGCAGTAC    420
        GAGGAGCTGG TGGACGTGAA CTGCAGCGCC GTGCTGCGCT TCTTCTTCTG TGCCATGTAC    480
25      GCGCCCATTT GCACCCTGGA GTTCCTGCAC GACCCTATCA AGCCGTGCAA GTCGGTGTGC    540
        CAACGCGCGC GCGACGACTG CGAGCCCCTC ATGAAGATGT ACAACCACGC CTGGCCCGAA    600
        AGCCTGGCCT GCGACGAGCT GCCTGTCTAT GACCGTGGCG TGTGCATTTC GCCTGAAGCC    660
        ATCGTCACGG ACCTCCCGGA GGATGTTAAG TGGATAGACA TCACACCAGA CATGATGGTA    720
        CAGGAAAGGC CTCTTGATGT TGACTGTAAA CGCCTAAGCC CCGATCGGTG CAAGTGTAAA    780
30      AAGGTGAAGC CAACTTTGGC AACGTATCTC AGCAAAAACT ACAGCTATGT TATTCATGCC    840
        AAAATAAAAG CTGTGCAGAG GAGTGGCTGC AATGAGGTCA CAACGGTGGT GGATGTAAAA    900
        GAGATCTTCA AGTCCTCATC ACCCATCCCT CGAACTCAAG TCCCGCTCAT TACAAATTCT    960
        TCTTGCCAGT GTCCACACAT CCTGCCCCAT CAAGATGTTC TCATCATGTG TTACGAGTGG    1020
        CGTTCAAGGA TGATGCTTCT TGAAAATTGC TTAGTTGAAA AATGGAGAGA TCAGCTTAGT    1080
35      AAAAGATCCA TACAGTGGGA AGAGAGGCTG CAGGAACAGC GGAGAACAGT TCAGGACAAG    1140
        AAGAAAACAG CCGGGCGCAC CAGTCGTAGT AATCCCCCCA AACCAAAGGG AAAGCCTCCT    1200
        GCTCCCAAAC CAGCCAGTCC CAAGAAGAAC ATTAAAACTA GGAGTGCCCA GAAGAGAACA    1260
        AACCCGAAAA GAGTGTGAGC TAACTAGTTT CCAAAGCGGA GACTTCCGAC TTCCTTACAG    1320
        GATGAGGCTG GGCATTGCCT GGGACAGCCT ATGTAAGGCC ATGTGCCCCT TGCCCTAACA    1380
40      ACTCACTGCA GTGCTCTTCA TAGACACATC TTGCAGCATT TTTCTTAAGG CTATGCTTCA    1440
        GTTTTTCTTT GTAAGCCATC ACAAGCCATA GTGGTAGGTT TGCCCTTTGG TACAGAAGGT    1500
        GAGTTAAAGC TGGTGGAAAA GGCTTATTGC ATTGCATTCA GAGTAACCTG TGTGCATACT    1560
        CTAGAAGAGT AGGGAAAATA ATGCTTGTTA CAATTCGACC TAATATGTGC ATTGTAAAAT    1620
        AAATGCCATA TTTCAAACAA AACACGTAAT TTTTTTACAG TATGTTTTAT TACCTTTTGA    1680
45      TATCTGTTGT TGCAATGTTA GTGATGTTTT AAAATGTGAT GAAAATATAA TGTTTTTAAG    1740
        AAGGAACAGT AGTGGAATGA ATGTTAAAAG ATCTTTATGT GTTTATGGTC TGCAGAAGTA    1800
        TTTTTGTGAT GAAAGGGGAT TTTTTGAAAA ATTAGAGAAG TAGCATATGG AAAATTATAA    1860
        TGTGTTTTTT TACCAATGAC TTCAGTTTCT GTTTTTAGCT AGAAACTTAA AAACAAAAAT    1920
        AATAATAAAG AAAAATAAAT AAAAAGGAGA GGCAGACAAT GTCTGGATTC CTGTTTTTTG    1980
50      GTTACCTGAT TTCCATGATC ATGATGCTTC TTGTCAACAC CCTCTTAAGC AGCACCAGAA    2040
        ACAGTGAGTT TGTCTGTACC ATTAGGAGTT AGGTACTAAT TAGTTGGCTA ATGCTCAAGT    2100
        ATTTTATACC CACAAGAGAG GTATGTCACT CATCTTACTT CCCAGGACAT CCACCCTGAG    2160
        AATAATTTGA CAAGCTTAAA AATGGCCTTC ATGTGAGTGC CAAATTTTGT TTTTCTTCAT    2220
        TTAAAATATT TCTTTGCCTA AATACATGTG AGAGGAGTTA AATATAAATG TACAGAGAGG    2280
55      AAAGTTGAGT TCCACCTCTG AAATGAGAAT TACTTGACAG TGGGATACT TTAATCAGAA     2340
        AAAAAGAACT TATTTGCAGC ATTTTATCAA CAAATTTCAT AATTGTGGAC AATTGGAGGC    2400
        ATTTATTTTA AAAAACAATT TTATTGGCCT TTTGCTAACA CAGTAAGCAT GTATTTTATA    2460
        AGGCATTCAA TAAATGCACA ACGCCCAAAG GAAATAAAAT CCTATCTAAT CCTACTCTCC    2520
        ACTACACAGA GGTAATCACT ATTAGTATTT TGGCATATTA TTCTCCAGGT GTTTGCTTAT    2580
60      GCACTTATAA AATGATTTGA ACAAATAAAA CTAGGAACCT GTATACATGT GTTTCATAAC    2640
        CTGCCTCCTT TGCTTGGCCC TTTATTGAGA TAAGTTTTCC TGTCAAGAAA GCAGAAACCA    2700
        TCTCATTTCT AACAGCTGTG TTATATTCCA TAGTATGCAT TACTCAACAA ACTGTTGTGC    2760
        TATTGGATAC TTAGGTGGTT TCTTCACTGA CAATACTGAA TAAACATCTC ACCGGAATTC    2820

65      Seq ID NO: C15 DNA Sequence
        Nucleic Acid Accession #: NM_005940
        Coding sequence: 23..1489

70      1          11         21         31         41         51
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        AAGCCCAGCA GCCCCGGGGC GGATGGCTCC GGCCGCCTGG CTCCGCAGCG CGGCCGCGCG    60
        CGCCCTCCTG CCCCCGATGC TGCTGCTGCT GCTCCAGCCG CCGCCGCTGC TGGCCCGGGC    120
        TCTGCCGCCG GACGTCCACC ACCTCCATGC CGAGAGGAGG GGGCCACAGC CCTGGCATGC    180
        AGCCCTGCCC AGTAGCCCGG CACCTGCCCC TGCCACGCAG GAAGCCCCCC GGCCTGCCAG    240
75      CAGCCTCAGG CCTCCCCGCT GTGGCGTGCC CGACCCATCT GATGGGCTGA GTGCCCGCAA    300
        CCGACAGAAG AGGTTCGTGC TTTCTGGCGG GCGCTGGGAG AAGACGGACC TCACCTACAG    360
        GATCCTTCGG TTCCCATGGC AGTTGGTGCA GGAGCAGGTG CGGCAGACGA TGGCAGAGGC    420
        CCTAAAGGTA TGGAGCGATG TGACGCCACT CACCTTTACT GAGGTGCACG AGGGCCGTGC    480
        TGACATCATG ATCGACTTCG CCAGGTACTG GCATGGGGAC GACCTGCCGT TTGATGGGCC    540
80      TGGGGGCATC CTGGCCCATG CCTTCTTCCC CAAGACTCAC CGAGAAGGGG ATGTCCACTT    600
        CGACTATGAT GAGACCTGGA CTATCGGGGA TGACCAGGGC ACAGACCTGT TGCAGGTGGC    660
        AGCCCATGAA TTTGGCCACG TGCTGGGGCT GCAGCACACA ACAGCAGCCA AGGCCCTGAT    720
        GTCCGCCTTC TACACCTTTC GCTACCCACT GAGTCTCAGC CCAGATGACT GCAGGGGCGT    780
        TCAACACCTA TATGCCAGCC CTGGCCCAC TGTCACCTCC AGGACCCCAG CCCTGGGCCC     840
        CCAGGCTGGG ATAGACACCA ATGAGATTGC ACCGCTGGAG CCAGACGCCC CGCCAGATGC    900
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        CTGTGAGGCC TCCTTTGACG CGGTCTCCAC CATCCGAGGC GAGCTCTTTT TCTTCAAAGC    960
        GGGCTTTGTG TGGCGCCTCC GTGGGGGCCA GCTGCAGCCC GGCTACCCAG CATTGGCCTC   1020
        TCGCCACTGG CAGGGACTGC CCAGCCCTGT GGACGCTGCC TTCGAGGATG CCCAGGGCCA   1080
        CATTTGGTTC TTCCAAGGTG CTCAGTACTG GGTGTACGAC GGTGAAAAGC CAGTCCTGGG   1140
        CCCCGCACCC CTCACCGAGC TGGGCCTGGT GAGGTTCCCG GTCCATGCTG CCTTGGTCTG   1200
        GGGTCCCGAG AAGAACAAGA TCTACTTCTT CCGAGGCAGG GACTACTGGC GTTTCCACCC   1260
        CAGCACCCGG CGTGTAGACA GTCCCGTGCC CCGCAGGGCC ACTGACTGGA GAGGGGTGCC   1320
        CTCTGAGATC GACGCTGCCT TCCAGGATGC TGATGGCTAT GCCTACTTCC TGCGCGGCCG   1380
        CCTCTACTGG AAGTTTGACC CTGTGAAGGT GAAGGCTCTG GAAGGCTTCC CCCGTCTCGT   1440
        GGGTCCTGAC TTCTTTGGCT GTGCCGAGCC TGCCAACACT TTCCTCTGAC CATGGCTTGG   1500
        ATGCCCTCAG GGGTGCTGAC CCCTGCCAGG CCACGAATAT CAGGCTAGAG ACCCATGGCC   1560
        ATCTTTGTGG CTGTGGGCAC CAGGCATGGG ACTGAGCCCA TGTCTCCTGC AGGGGGATGG   1620
        GGTGGGGTAC AACCACCATG ACAACTGCCG GGAGGGGCCAC GCAGGTCGTG GTCACCTGCC   1680
        AGCGACTGTC TCAGACTGGG CAGGGAGGCT TTGGCATGAC TTAAGAGGAA GGGCAGTCTT   1740
        GGGACCCGCT ATGCAGGTCC TGGCAAACCT GGCTGCCCTG TCTCATCCCT GTCCCTCAGG   1800
        GTAGCACCAT GGCAGGACTG GGGGAACTGG AGTGTCCTTG CTGTATCCCT GTTGTGAGGT   1860
        TCCTTCCAGG GGCTGGCACT GAAGCAAGGG TGCTGGGGCC CCATGGCCTT CAGCCCTGGC   1920
        TGAGCAACTG GGCTGTAGGG CAGGGCCACT TCCTGAGGTC AGGTCTTGGT AGGTGCCTGC   1980
        ATCTGTCTGC CTTCTGGCTG ACAATCCTGG AAATCTGTTC TCCAGAATCC AGGCCAAAAA   2040
        GTTCACAGTC AAATGGGGAG GGGTATTCTT CATGCAGGAG ACCCCAGGCC CTGGAGGCTG   2100
        CAACATACCT CAATCCTGTC CCAGGCCGGA TCCTCCTGAA GCCCTTTTCG CAGCACTGCT   2160
        ATCCTCCAAA GCCATTGTAA ATGTGTGTAC AGTGTGTATA AACCTTCTTC TTCTTTTTTT   2220
        TTTTTAAACT GAGGATTGTC ATTAAACACA GTTGTTTTCT                           2260
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Seq ID NO: C16 DNA Sequence
Nucleic Acid Accession #: NM_024022
Coding sequence: 202..1563

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        GGAAAGGGCT GTGTTTATGG GAAGCCAGTA ACACTGTGGC CTACTATCTC TTCCGTGGTG   120
        CCATCTACAT TTTTGGGACT CGGGAATTAT GAGGTAGAGG TGGAGGCGGA GCCGGATGTC   180
        AGAGGTCCTG AAATAGTCAC CATGGGGGAA AATGATCCGC CTGCTGTTGA AGCCCCCTTC   240
        TCATTCCGAT CGCTTTTTGG CCTTGATGAT TTGAAAATAA GTCCTGTTGC ACCAGATGCA   300
        GATGCTGTTG CTGCACAGAT CCTGTCACTG CTGCCATTGA AGTTTTTTCC AATCATCGTC   360
        ATTGGGATCA TTGCATTGAT ATTAGCACTG GCCATTGGTC TGGGCATCCA CTTCGACTGC   420
        TCAGGGAAGT ACAGATGTCG CTCATCCTTT AAGTGTATCG AGCTGATAGC TCGATGTGAC   480
        GGAGTCTCGG ATTGCAAAGA CGGGGAGGAC GAGTACCGCT GTGTCCGGGT GGGTGGTTCA   540
        AATGCCGTGC TCCAGGTGTT CACAGCTGCT TCGTGGAAGA CCATGTGCTC CGATGACTGG   600
        AAGGGTCACT ACGCAAATGT TGCCTGTGCC CAACTGGGTT TCCCAAGCTA TGTGAGTTCA   660
        GATAACCTCA GAGTGAGCTC GCTGGAGGGG CAGTTCCGGG AGGAGTTTGT GTCCATCGAT   720
        CACCTCTTGC CAGATGACAA GGTGACTGCA TTACACCACT CAGTATATGT GAGGGAGGGA   780
        TGTGCCTCTG GCCACGTGGT TACCTTGCAG TGCACAGCCT GTGGTCATAG AAGGGGCTAC   840
        AGCTCACGCA TCGTGGGTGG AAACATGTCC TTGCTCTCGAC AGTGCCCTG GCAGGCCAGC   900
        CTTCAGTTCC AGGGCTACCA CCTGTGCGGG GGCTCTGTCA TCACGCCCCT GTGGATCATC   960
        ACTGCTCACAC ACTGTGTTTA TGACTTGTAC CTCCCCAAGT CATGGACCAT CCAGGTGGGT  1020
        CTAGTTTCCC TGTTGGACAA TCCAGCCCCA TCCCACTTGG TGGAGAAGT TGTCTACCAC   1080
        AGCAAGTACA AGCCAAAGAG GCTGGGCAAT GACATCGCCC TTATGAAGCT GGCCGGGCCA  1140
        CTCACGTTCA ATGAAATGAT CCAGCCTGTG TGCCTGCCCA ACTCTGAAGA GAACTTCCCC  1200
        GATGGAAAAG TGTGCTGGAC GTCAGGATGG GGGGCCACAG AGGATGGAGG TGACGCCTCC   1260
        CCTGTCCTGA ACCACGCGGC CGTCCCTTTG ATTTCCAACA CCACAGGGAC  1320
        GTGTACGGTG GCATCATCTC CCCCTCCATG CTCTGCGCGG GCTACCTGAC GGGTGGCGTG   1380
        GACAGCTGCC AGGGGGACAG CGGGGGGCCC CTGGTGTGTC AAGAGAGGAG GCTGTGGAAG   1440
        TTAGTGGGAG CGACCAGCTT TGGCATCGGC TGCGCAGAGG TGAACAAGCC TGGGGTGTAC   1500
        ACCCGTGTCA CCTCCTTCCT GGACTGGATC CACGAGCAGA TGGAGAGAGA CCTAAAAACC   1560
        TGAAGAGGAA GGGGACAAGT AGCCACCTGA GTTCCTGAGG TGATGAAGAC AGCCCGATCC   1620
        TCCCCTGGAC TCCCGTGTAG GAACCTGCAC ACGAGCAGAC CCCTTGGAG CTCTGAGTTC   1680
        CGGCACCAGT AGCAGGCCCG AAAGAGGCAC CCTTCCATCT GATTCCAGCA CAACCTTCAA   1740
        GCTGCTTTTT GTTTTTTGTT TTTTTGAGGT GGAGTCTCGC TCTGTTGCCC AGGCTGGAGT   1800
        GCAGTGGCGA AATCCCTGCT CACTGCAGCC TCCGCTTCCC TGGTTCAAGC GATTCTCTTG   1860
        CCTCAGCTTC CCCAGTAGCT GGGACCACAG GTGCCCGCCA CCACACCCAA CTAATTTTTG   1920
        TATTTTTAGT AGAGACAGGG TTTCACCATG TTGGCCAGGC TGCTCTCAAA CCCCTGACCT   1980
        CAAATGATGT GCCTGCTTCA GCCTCCCACA GTGCTGGGAT TACAGGCATG GGCCACCACG   2040
        CCTAGCCTCA CGCTCCTTTC TGATCTTCAC TAAGAACAAA AGAAGCAGCA ACTTGCAAGG   2100
        GCGGCCTTTC CCACTGGTCC ATCTGGTTTT CTCTCCAGGG GTCTTGCAAA ATTCCTGACG   2160
        AGATAAGCAG TTATGTGACC TCACGTGCAA AGCCACCAAC AGCCACTCAG AAAAGACGCA   2220
        CCAGCCCAGA AGTGCAGAAC TGCAGTCACT GCACGTTTTC ATCTCTAGGG ACCAGAACCA   2280
        AACCCACCCT TTCTACTTCC AAGACTTATT TTCACATGTG GGGAGGTTAA TCTAGGAATG   2340
        ACTCGTTTAA GGCCTATTTT CATGATTTCT TTGTAGCATT TGGTGCTTGA CGTATTATTG   2400
        TCCTTTGATT CCAAATAATA TGTTTCCTTC CCTCAAAAAA AAAAAAAAA AAAAAAAAA    2460
        AAAAA                                                              2465
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Seq ID NO: C17 DNA Sequence
Nucleic Acid Accession #: NM_003220
Coding sequence: 63..1376

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        GAATTCCGGC TCTCTGGGTG AGAGACCGAG AGGGGCATAT CCGTTCACGC CGATCCCATGA    60
        AAATGCTTTG GAAATTGACG GATAATATCA AGTACGAGGA CTGCGAGGAC CGTCACGACG   120
        GCACCAGCAA CGGGACGGCA CGGTTGCCCC AGCTGGGCAC TGTAGGTCAA TCTCCCTACA   180
        CGAGCGCCCC GCCGCTGTCC CACACCCCCA ATGCCGACTT CCAGCCCCCA TACTTCCCCC   240
        CACCCCTACCA GCCTATCTAC CCCCAGTCGC AAGATCCTTA CTCCCACGTC AACGACCCCT   300
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ACAGCCTGAA CCCCCTGCAC GCCCAGCCGC AGCCGCAGCA CCCAGGCTGG CCCGGCCAGA   360
GGCAGAGCCA GGAGTCTGGG CTCCTGCACA CGCACCGGGG GCTGCCTCAC CAGCTGTCGG   420
GCCTGGATCC TCGCAGGGAC TACAGGCGGC ACGAGGACCT CCTGCACGGC CCACACGCGC   480
TCAGCTCAGG ACTCGGAGCA CTCTCGATCC ACTCCTTACC TCACGCCATC GAGGAGGTCC   540
CGCATGTAGA AGACCCGGGT ATTAACATCC CAGATCAAAC TGTAATTAAG AAAGGCCCCG   600
TGTCCCTGTC CAAGTCCAAC AGCAATGCCG TCTCCGCCAT CCCTATTAAC AAGGACAACC   660
TCTTCGGCGG CGTGGTGAAC CCCAACGAAG TCTTCTGTTC AGTTCCGGGT CGCCTCTCGC   720
TCCTCAGCTC CACCTCGAAG TACAAGGTCA CGGTGGCGGA AGTGCAGCGG CGGCTCTCAC   780
CACCCGAGTG TCTCAACGCG TCGCTGCTGG GCGGGAGTGCT CCGGAGGGCG AAGTCTAAAA   840
ATGGAGGAAG ATCTTTAAGA GAAAAACTGG ACAAAATAGG ATTAAATCTG CCTGCAGGGA   900
GACGTAAAGC TGCCAACGTT ACCCTGCTCA CATCACTAGT AGAGGGAGAA GCTGTCCACC   960
TAGCCAGGGA CTTTGGGTAC GTGTGCGAAA CCGAATTTCC TGCCAAAGCA GTAGCTGAAT   1020
TTCTCAACCG ACAACATTCC GATCCCAATG AGCAAGTGAC AAGAAAAAAC ATGCTCCTGG   1080
CTACAAAACA GATATGCAAA GAGTTCACCG ACCTGCTGGC TCAGGACCGA TCTCCCCTGG   1140
GGAACTCACG GCCCAACCCC ATCCTGGAGC CCGGCATCCA GAGCTGCTTG ACCCACTTCA   1200
ACCTCATCTC CCACGGCTTC GGCAGCCCCG CGGTGTGTGC CGCGGTCACG GCCCTGCAGA   1260
ACTATCTCAC CGAGGCCCTC AAGGCCATGG ACAAAATGTA CCTCAGCAAC AACCCCAACA   1320
GCCACACGGA CAACAACGCC AAAAGCAGTG ACAAAGAGGA GAAGCACAGA AAGTGAGGCT   1380
CTCCTCCCGC CCCGCCCCTC CCACGCCTCA CCAGCCCCCC GCGCGCCCAC CCTCCGGCGG   1440
GTGACAGCTC CGGGATCAGC AACCCTTCCT GCTGCTGCTA CTGCTGCTGC TGCTGCCGCC   1500
GCCGCCGCCG CCGCTGCCCT TGGGTCCCCC CGAGTCTCCG GGACTGCCCT CTCGACTGTC   1560
AGTGGGGCAG CCTCTCCGAC TCTGCACCCG CCTCGACCTC CCCACCCGCT CCCACACCCC   1620
TGTGCCCCCG GAATTC                                                   1636
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Seq ID NO: C18 DNA Sequence
Nucleic Acid Accession #: NM_002988
Coding sequence: 71..340

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CCGGCACGAG AGGAGTTGTG AGTTTCCAAG CCCCAGCTCA CTCTGACCAC TTCTCTGCCT   60
GCCCAGCATC ATGAAGGGGC TTGCAGCTGC CCTCCTTGTC CTCGTCTGCA CCATGGCCCT   120
CTGCTCCTGT GCACAAGTTG GTACCAACAA AGAGCTCTGC TGCCTCGTCT ATACCTCCTG   180
GCAGATTCCA CAAAAGTTCA TAGTTGACTA TTCTGAAACC AGCCCCCAGT GCCCCAAGCC   240
AGGTGTCATC CTCCTAACCA AGAGAGGCCG GCAGATCTGT GCTGACCCCA ATAAGAAGTG   300
GGTCCAGAAA TACATCAGCG ACCTGAAGCT GAATGCCTGA AGCTGCGAGG   360
GCCCAGTGAA CTTGGTGGGC CCAGGAGGGA ACAGGAGCCT GAGCCAGGGC AATGGCCCTG   420
CCACCCTGGA GGCCACCTCT TCTAAGAGTC CCATCTGCTA TGCCCAGCCA CATTAACTAA   480
CTTTAATCTT AGTTTATGCA TCATATTTCA TTTTGAAATT GATTTCTATT GTTGAGCTGC   540
ATTATGAAAT TAGTATTTTC TCTGACATCT CATGACATTG TCTTTATCAT CCTTTCCCCT   600
TTCCCTTCAA CTCTTCGTAC ATTCAATGCA TGGATCAATC AGTGTGATTA GCTTTCTCAG   660
CAGACATTGT GCCATATGTA TCAAATGACA AATCTTTATT GAATGGTTTT GCTCAGCACC   720
ACCTTTTAAT ATATTGGCAG TACTTATTAT ATAAAAGGTA AACCAGCATT CTCACTGTGA   780
AAAAAAAAAA AAAAAAAAAA AAA                                           803
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Seq ID NO: C19 DNA Sequence
Nucleic Acid Accession #: NM_004063
Coding sequence: 121..2619

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AGGGAGTGTT CCCGGGGGAG ATACTCCAGT CGTAGCAAGA GTCTCGACCA CTGAATGGAA   60
GAAAGGACT TTTAACCACC ATTTTGTGAC TTACAGAAAG GAATTTGAAT AAAGAAAACT   120
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TATGGCCAAG AGGGGAAGTT TAGTGGACCC CTGAAACCCA TGACATTTTC TATTTATGAA   240
GGCCAAGAAC CGAGTCAAAT TATATTCCAG TTTAAGGCCA ATCCTCCTGC TGTGACTTTT   300
GAACTAACTG GGGAGACAGA CAACATATTT GTGATAGAAC GGGAGGGACT TCTGTATTAC   360
AACAGAGCCT TGGACAGGGA AACAAGATCT ACTCACAATC TCCAGGTTGC AGCCCTGGAC   420
GCTAATGGAA TTATAGTGGA GGGTCCAGTC CCTATCACCA TAGAAGTGAA GGACATCAAC   480
GACAATCGAC CCACGTTTCT CCAGTCAAAG TACGAAGGCT CAGTAAGGCA GAACTCTCGC   540
CCAGGAAAGC CCTTCTTGTA TGTCAATGCC ACAGACCTGG ATGAACCGGC CACTCCCAAT   600
GGCCAGCTTT ATTACCAGAT TGTCATCCAG CTTCCCATGA TCAACAATGT CATGTACTTT   660
CAGATCAACA ACAAAACGGG AGCCATCTCT CTTACCCGAG AGGGATCTCA GGAATTGAAT   720
CCTGCTAAGA ATCCTTCCTA TAATCTGGTG ATCTCAGTGA AGGACATGGG AGGCCAGAGT   780
GAGAATTCCT TCAGTGATAC CACATCTGTG GATATCATAG TGACAGAGAA TATTTGGAAA   840
GCACCAAAAC CTGTGGAGAT GGTGGAAAAC TCAACTGATC CTCACCCCAT CAAAATCACT   900
CAGGTGCGGT GGAATGATCC CGGTGCACAA TATTCCTTAG TTGACAAAGA GAAGCTGCCA   960
AGATTCCCAT TTTCAATTGA CCAGGAAGGA GATATTTACG TGACTCAGCC CTTGGACCGA   1020
GAAGAAAAGG ATGCATATGT TTTTTATGCG GTTGCAAAGG ATGAGTACGG AAAACCACTT   1080
TCATATCCGC TGGAAATTCA TGTAAAAGTT AAAGATATTA ATGATAATCC ACCTACATGT   1140
CCGTCACCGC TAACCGTATT TGAGGTCCAG GAGAATGAAC GACTGGGTAA CAGTATCGGG   1200
ACCCTTACTG CACATGACAG GGATGAAGAA AATACTGCCA ACAGTTTTCT AAACTACAGG   1260
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GGAATGTTAC AGTTAGCTAA ACAGTCCTTG AAGAAGCAAG ATACTCCTCA GTACAACTTA   1380
ACGATAGAGG TGTCTGACAA AGATTTCAAG ACCCTTTGTT TTGTGCAAAT CAACGTTATT   1440
GATATCAATG ATCAGATCCC CATCTTTGAA AAATCAGATT ATGGAAACCT GACTCTTGCT   1500
GAAGACACAA ACATTGGGCA CACCATCTTA ACCATCCAGG CCACTGATGC TGATGAGCCA   1560
TTTACTGGGA GTTCTAAAAT TCTGTATCAT ATCATAAAGG GAGACAGTGA GGGACGCCTG   1620
GGGGTTGACA CAGATCCCCA TACCAACACC GGATATGTCA TAATTAAAAA GCCTCTTGAT   1680
TTTGAAACAG CAGCTGTTTC CAACATTGTG TTCAAAGCAG AAAATCCTGA GCCTCTAGTG   1740
TTTGGTGTGA AGTACAATGC AAGTTCTTTT GCCAAGTTCA CGCTTATTGT GACAGATGTG   1800
AATGAAGCAC CTCAATTTTC CCAACACGTA TTCCAAGCGA AAGTCAGTGA GGATGGTAGCT   1860
ATAGGCACTA AAGTGGGGCAA TGTGACTGCC AAGGATCCAG AAGGTCTGGA CATAAGCTAT   1920
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ACTACCTGCC ATGCATACAT GCTGCGCATG TTTTCTTCAT TCGTATGTTA GTAAAGTTTT   3600
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Seq ID NO: C20 DNA Sequence
Nucleic Acid Accession #: NM_004443
Coding sequence: 28..3024

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CAGACGCTGC CTGTGCAGGT CTGACACCGG CTCCCACGGG GACCCTGAGG ACCGTGCAGG   3060
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Seq ID NO: C21 DNA Sequence
Nucleic Acid Accession #: NM_001804
Coding sequence: 82..879

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GCCCCGCCCC CGGGCGCCCC GCAGTACCCC GACTTCTCCA GCTACTCTCA CGTGGAGCCG   240
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GAGTGGATGC GGCGCAGCGT GGCGGCCGGA GGCGGCGGTG GCAGCGGTAA GACTCGGACC   540
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CGGGGGACCT GGGGACTCGG GTGCTGGGAG TGTGGCTCCT GTGGGCCCAG GAGGTCTGGT   960
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CACTGGGTTA CAGAATCACA GCCCTCATGA TCATTCTCAG TGAGGGCTCT GGATTGAGAG   1500
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CAGGCTGCCC ATCAGGGCCC AGGGAGCCCC CAGAGGACTT TATTCGGACC AAGCAGAGCT   1620
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Seq ID NO: C22 DNA Sequence
Nucleic Acid Accession #: NM_021978
Coding sequence: 36..2603

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AGCATGGCCC GGGGCGCTGG GTGGTGCTGG CAGCCGTGCT GATCGGCCTC CTCTTGGTCT   240
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TCTTCAATGG CTACATGAGG ATCACAAATG AGAATTTTGT GGATGCCTAC GAGAACTCCA   360
ACTCCACTGA GTTTGTAAGC CTGGCCAGCA AGGTGAAGGA CGCGCTGAAG CTGCTGTACA   420
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TCCACTCAGA TCAGTCCTAC ACCGACACCG GCTTCTTAGC TGAATACCTC TCCTACGACT   1380
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TGGGCCACGC TCTTGAGGAA GCCCAGGCTC GGAGGACCCT GGAAAACAGA CGGGTCTGAG   3060
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Seq ID NO: C23 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..2268

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TTTGCTGTGG GGGTCAGGTT TCCCAGGTGG GAGGAGCTGC ATGCACTGGC CAGCGAGCCT   600
AGAGGGCAGC ACGTGCTGTT GGCTGAGCAG GTGGAGGATG CCACCAACGG CCTCTTCAGC   660
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Seq ID NO: C24 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..2424

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      ACCCTCAGCA GCTCGGCCAT CTGCTCCAGC GCCACGCCAG ACTGCAGGGT CGAGGCTCAC   720
      CCCTGTGAGC ACAGGACGCT GGAGATGGTC CGGGAGTTCG CTGGCAATGC CCCATGCTGG   780
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      TCGCAGCCCT GCCAGAATGG AGGCACATGT GTTCCAGAAG GACTGGACGG CTACCAGTGC   960
      CTCTGCCCGC TGGCCTTTGG AGGGGAGGCT AACTGTGCCC TGAAGCTGAG CCTGGAATGC  1020
      AGGGTCGACC TCCTCTTCCT GCTGGACAGC TCTGCGGGCA CCACTCTGGA CGGCTTCCTG  1080
      CGGGCCAAAG TCTTCGTGAA GCGGTTTGTG CGGGCCGTGC TGAGCGAGGA CTCTCGGGCC  1140
      CGAGTGGGTG TGGCCACATA CAGCAGGGAG CTGCTGGTGG CGGTGCCCTGT GGGGGAGTAC  1200
      CAGGATGTGC CTGACCTGGT CTGGAGCCTC GATGGCATTC CCTTCCGTGG TGGCCCCACC  1260
      CTGACGGGCA GTGCCTTGCG GCAGGCGGCA GAGCGTGGCT TCGGGAGCGC CACCAGGACA  1320
      GGCCAGGACC GGCCACGTAG AGTGGTGGTT TTGCTCACTG AGTCACACTC CGAGGATGAG  1380
      GTTGCGGGCC CAGCGCGTCA CGCAAGGGCG CGAGAGCTGC TCCTGCTGGG TGTAGGCAGT  1440
      GAGGCCGTGC GGGCAGAGCT GGAGGAGATC ACAGGCAGCC CAAAGCATGT GATGGTCTAC  1500
      TCGGATCCTC AGGATCTGTT CAACCAAATC CCTGAGCTGC AGGGGAAGCT GTGCAGCCGG  1560
      CAGCGGCCAG GGTGCCGGAC ACAAGCCCTG GACCTCGTCT TCATGTTGGA CACCTCTGCC  1620
      TCAGTAGGGC CCGAGAATTT TGCTCAGATG CAGAGCTTTG TGAGAAGCTG TGCCCTCCAG  1680
      TTTGAGGTGA ACCCTGACGT GACACAGGTC GGCCTGGTGG TGTATGGCAG CCAGGTGCAG  1740
      ACTGCCTTCG GGCTGGACAC CAAACCCACC CGGGCTGCGA TGCTGCGGGC CATTAGCCAG  1800
      GCCCCCTACC TAGGTGGGGT GGGCTCAGCC GGCACGGCCC TGCTGCACAT CTATGACAAA  1860
      GTGATGACCG TCCAGAGGGG TGCCCGGCCT GGTGTCCCCA AAGCTGTGGT GGTGCTCACA  1920
      GGCGGGAGAG GCGCAGAGGA TGCAGCCGTT CCTGCCCAGA AGCTGAGGAA CAATGGCATC  1980
      TCTGTCTTGG TCGTGGGCGT GGGGCCTGTC CTAAGTGAGG GTCGTGGGAG GCTTGCAGGT  2040
      CCCCGGGATT CCCTGATCCA CGTGGCAGCT TACGCCGACC TGCCGGTACCA CCAGGACGTG  2100
      CTCATTGAGT GGCTGTGTGG AGAAGCCAAG CAGCCAGTCA ACCTCTGCAA ACCCAGCCCG  2160
      TGCATGAATG AGGGCAGCTG CGTCCTGCAG AATGGGAGCT ACCGCTGCAA GTGTCGGGAT  2220
      GGCTGGGAGG GCCCCCACTG CGAGAACCGT GAGTGGAGCT CTTGCTCTGT ATGTGTGAGC  2280
      CAGGGATGGA TTCTTGAGAC GCCCCTGAGG CACATGGCTC CCGTGCAGGA GGGCAGCAGC  2340
      CGTACCCCTC CCAGCAACTA CAGAGAAGGC CTGGGCACTG AAATGGTGCC TACCTTCTGG  2400
      AATGTCTGTG CCCCAGGTCC TTAG                                          2424

      Seq ID NO: C25 DNA Sequence
      Nucleic Acid Accession #: XM_097386.3
      Coding sequence: 142..795

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      CTACCTCAGG TCTGACTTTT GATGCCAAAA TCTGAGCCCC TGGGGTGCCT CTCCCCCGCC  180
      TCCCGTGCAC CAGGGTCTGC AGCAGCCACT GGGGGCCTGG TGCCTGCTGC ATCTGGCGGC  240
      CCTGGACCCC TGGGGCCCCC GTGCACCTGC CCACCTCGGA GCCTGGGGAG GGGCCGTGCA  300
      GGGTCGAGGG CTGGGTCGTC TCCCTCGGGC TGCGTGTGTG TGTCGGGAAT CCTGCGTGTC  360
      GTGTCTGTGG GCGATCCGGC CTCCCGGCGG TGGGTGGACC TGGATTCTAA CTCAGAGGAC  420
      TTGAGCCTGC TGTTAACTCC GATGATTGTA GGGACAGGCG GGGTGGGTGG GGGGTGGGCG  480
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      GGAAATGGGA GGCGGTTGCA GAGGGTCTAT GGGGCCCGGT CCTGGATACT CGGCAGGAAG  600
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      TCTCCTGCCA CCGCCTGTCG GTGGGGGTTT AAATTCGGTG TGGCTTTCTG GGGTGCAGCT  720
      CAGCACCCCC CCTTATGCAG ACTGGGAGGG GGTCGGGCAG TCCCCTCAGC CACGAGGACC  780
      CTGGATGGGT TCTAGTTCAC TTGGGACCGT GGGGCCTGGC TGCGTACTGA GTGGGTGCCC  840
      CACAGTCAAG GCCAACGGGG GCTCCCCCTG CTCTGAGATG TTGGGAGAAA GGCGGCTTCT  900
      GGAACCTTCC GTGGGACCCG TAAGTGGCTG TCCAGAAAGG CGGGAGGGTG GGCACGGGGC   960
      ACGGGGGGCA GCTGGGGTCG TTGTTAAGGG TCACGCATCT GTACAGTTGA ATTTCCTTTC  1020
      TCTTATCATG TTTTACCCAC CTTGTCCCTT TTTTCCCCAA TTGTGCTTTT GCATTTTTTT  1080
      CCTTGGCAAA TGTAAACTCA GCCTTTCATT CATGACGTGT GAAATTTCAG TTTCTCTGGA  1140
      GTTTGTCAGA CGGCGTGGGA ACCACGCCTG AAACTCAGGT AATAGGAGGA AAAAAAAAA   1200
      AACTTAAAAA AATTTTTAAA AAACATAAAA CTACTCTCTA CCTCTGGCTG GGCCCAGCCT  1260
      GTCTCGCCCT GGCCGCGGCA GGGTGGCCTG TAACAATTTC AGTTTTCGCA GAACATTCAG  1320
      GTATTAAAAG GAAAAAA                                                 1337

      Seq ID NO: C26 DNA Sequence
      Nucleic Acid Accession #: Eos sequence
      Coding sequence: 95..2128

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      CTCCTGGAAA GGAGAGACAC CAGCATTTGC CACAATGCTG TCATCCACTG ACTTTACATT  120
      TGCTTCCTGG GAGCTTGTGG TCCGCGTTGA CCATCCCAAT GAAGAGCAGC AGAAAGACGT  180
      CACACTGAGA GTATCTGGAG ACCTTCATGT TGGAGGAGTG ATGCTCAAGT TAGTAGAACA  240
      GATCAATATA TCCCAAGACT GGTCAGACTT TGCTCTTTGG TGGGAACAGA AGCATTGCTG  300
      GCTTCTGAAA ACCCACTGGA CCCTGGACAA ATATGGGGTC CAGGCAGATG CAAAGCTTCT  360
      CTTCACCCCT CAGCATAAAA TGCTGCGCCT TCGTCTGCCG AATTTGAAGA TGGTGAGGTT  420
      GCGAGTCAGC TTCTCAGCTG TGGTTTTTAA AGCTGTCAGT GATATCTGCA AAATCCTGAA  480
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        TATTAGAAGA TCAGAAGAGC TTTCCTTGTT AAAGCCGTCT GGTGACTATT TTAAGAAGAA   540
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        TTCTCCAACA GCTTCAGGTT CATCAGTAAG TCCTGGTTTA TACAGTAAAA CCATGACCCC   660
        TATATATGAC CCCATCAATG GAACACCAGC ATCATCCACC ATGACTTGGT TCAGTGACAG   720
5       CCCTTTGACG GAACAAAACT GCAGCATCCT CGCATTCAGC CAACCCCCCC AGTCCCCAGA   780
        AGCACTTGCG GATATGTACC AGCCTCGGTC TCTGGTTGAT AAAGCCAAGC TCAATGCAGG   840
        TTGGCTAGAC TCCTCACGCT CCCTTATGGA ACAAGGCATC CAAGAGGATG AGCAGCTGCT   900
        CTTACGATTT AAATATTATT CTTTCTTCGA CTTGAATCCT AAATATGATG CTGTCCGAAT   960
        AAACCAACTG TATGAGCAAG CCAGGTGGGC CATTCTCTTA GAAGAAATTG ATTGCACAGA  1020
10      GGAAGAAATG TTGATCTTTG CAGCTCTACA GTACCACATT AGCAAACTGT CGTTGTCTGC  1080
        TGAAACACAG GATTTTGCAG GCGAGTCCGA GGTTGATGAA ATAGAAGCGG CGCTTTCTAA  1140
        TTTGGAAGTA ACCCTAGAAG GTGGAAAAGC GGACAGCCTT TTGGAGGACA TTACTGATAT  1200
        CCCTAAACTT GCAGATAATC TCAAATTATT TAGGCCCAAG AAGTTACTAC CAAAAGCTTT  1260
15      CAAACAATAT TGGTTTATCT TTAAAGACAC ATCCATAGCA TACTTTAAAA ATAAGGAACT  1320
        TGAACAAGGA GAACCACTAG AAAAACTAAA TCTTAGAGGC TGCGAAGTTG TGCCCGATGT  1380
        AAATGTAGCA GGAAGAAAAT TTGGAATCAA GTTACTAATC CCTGTTGCCG ATGGTATGAA  1440
        TGAAATGTAT TTGAGATGTG ACCATGAGAA TCAATACGCC CAATGGATGG CTGCCTGCAT  1500
        GTTGGCATCG AAGGGCAAAA CCATGGCAGA CAGCTCCTAC CAGCCAGAGG TCCTCAACAT  1560
20      CCTTTCATTT CTGAGGATGA AAAACAGGAA CTCTGCATCT CAGGTGGCTT CCAGTCTCGA  1620
        AAACATGGAT ATGAACCCAG AATGTTTTGT GTCACCACGG TGTGCAAAAA GACACAAATC  1680
        CAAACAGCTG GCCGCCCGGA TCCTGGAGGC GCACCAGAAC GTGGCCCAGA TGCCCCTGGT  1740
        CGAAGCCAAG CTGCGGTTCA TCCAGGCGTG GCAGTCACTG CCTGAGTTTG GCCTCACCTA  1800
        CTACCTTGTC AGATTTAAAG GAAGCAAAAA AGATGACATT CTGGGAGTTT CATATAACAG  1860
25      GTTGATTAAA ATTGATGCAG CCACCGGGAT TCCAGTGACA ACATGGAGAT TCACAAATAT  1920
        CAAACAGTGG AATGTAAACT GGGAAACCCG GCAGGTGGTC ATCGAGTTTG ACCAAAACGT  1980
        CTTTACTGCT TTCACCTGCC TGAGTGCAGA TTGCAAGATT GTGCACGAGT ACATTGGCGG  2040
        CTACATTTTC TTGTCCACCC GCTCCAAGGA CCAGAATGAA ACACTCGATG AGGACTTGTT  2100
        CCACAAATTG ACCGGCGGTC AGGATTGAAA CAAGCACGCG TGCTCGGCTC ACACCAACAA  2160
30      GGCAAGCCAA AGGCGCCCCT CCCCAGAGGG ATCCCTAACG TGCCCAGCAT GTAGATTCTG  2220
        GACTAACAGA CAACATACAT TCACCGCTGG TCACCCAGAT CCTCATTCAA ACCCACTGCT  2280
        GGCACATCCC TTTCCTTACT TTGCCCTGTG CTACCAGCCA CGGAAGGAGC CTCTCTTGTT  2340
        TTTTCTATAA AATGGGTAGG CAGGAGAAAA GCAGGTGCCC TAAGATTGCT CTAAGGCCCA  2400
        GCATGTGGTT ACAGTTCTCT GACTTGCAGA ACCTGCCAGG TGTATGGCTA CAAGTTATCC  2460
35      TCGTGCTGAT CTGTCTCATT ACTAAGTCAA TGGAGAAGAC AGAAAGGTAA AAATCACGTG  2520
        TAGCAAGAAC AACTCTTATT TCACAAACTC AGGTATGAAA CGAAACGCCT GTCCTTCATG  2580
        GAACTGCTTT TAGCTCCTGT CTTTTCAAAA TGGCAGAGGG AGTTCCTACA CACACTTTTT  2640
        CCCTGGAGGC CAAGGTCTAG GGGTAGAAAG GGGAGGGGTG GGGCTACCAG GTAGCAGTTG  2700
        ACAACCCAAG GTCAGAGGAG TGGCCCTCAG TGTCATCTGT CCACAGTGAT ACCTGCCAAG  2760
40      ATGACCACTG ACCCACATCT GGTCTTAGTC ATTGGTCTCC TCAGATTTCT GGGGCCAACT  2820
        GCAAGCCCCA TTCCATTCCT ACAGATCTCT CAGCCACCTG TAAGTCCTTT GTGAAGATGT  2880
        GGGTGACACA GGGGGACAGG AAAACCCATT TCTCAACCCA GATCCATGTC TCCACTGCTT  2940
        CTACTCTGGG TTGGGATTCA GGAAGACAGG CACAGTCCTC TCTGTTCATA GAAACACCTG  3000
        CCAGTGTCAA GGATTCCAGT CAGGTGTCTA TCCCAACTGG TCAGGGAGAG AAGGGCAGAC  3060
45      CCATTCTCAA AGACCACCAT GTCCAAGGTC TGACAGCTCC CCACTGGCTG CCCCCACAGG  3120
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        TGGATTTGGT ATCTATGTTG GTACGACTCC TGGCCTTTTA TCTAAAGGAC TTTGGCTTTT  3240
        GTAAATCACA AGCCAATAAT AGACTTTTTT CTCCCCCTCT GTTTTTTGCT GTGTCATCTC  3300
        TGCCTTGAGA CTGCCTTGAG ACAGTGCTTG CCTTGAGAGA GTGAGCCAAT TAACAGCTGC  3360
50      CTGAATTGTC ATTTTCCATT TTGGTTTGTT AGAGGTGGGA GGGGTGGGTT TTGAGAAGGT  3420
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        TGTTCTGCCA CACAAAGAAC TTGGGGTGTA AGGATAAGGC AAAAGCTCCA ATCCCATTTT  3540
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        TCAGCTGTTG CTTTATTTTC CATCAAAGCC CTCTGAGAAG TGAGACCTCA GCAATTCCGG  3660
55      GAGCCACATA GAGACAGACT TGGCAAGGGA CCCCCTGGTT CTGAGCCAGT AGCTGCCATC  3720
        TGGAAATTCC TCTTTTAGCC TCTCCTTAGA GGTGAATGTG AATGAAGCCT CCCAGGCACC  3780
        CGCTGAATTT CTGAGGCCTT GCTTAAAGCT CAGAAGTGGT TTAGGCATTG GGAAAATCTG  3840
        GTTCACATCA TAAAGAACTT GATTTGAAAT GTTTTCTATA GAAACAAGTG CTAAGTGTAC  3900
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60      CCTAGTCAGT TCTTTAAGAT TATAACTGGT CCTACATTAA AATAATGCTT CTCGATGTCA  4020
        GATTTTACCT GTTTGCTGCT GAGAACATCT CTGCCTAATT TACCAAAGCC AGACCTTCAG  4080
        TTCAACATGC TTCCTTAGCT TTTCATAGTT GTCTGACATT TCCATGAAAA CAAAGGAACC  4140
        AACTTTGTTT TAACCAAACT TTGTTTGGTT ACAGTTTTCA GGGGAGCGTT TCTTCCATGA  4200
        CACACAGCAA CATCCCAAAG AAATAAACAA GTGTGACAAA AAAAAAAAAA AACAAACCTA  4260
65      AATGCTACTG TTCCAAAGAG CAACTTGATG GTTTTTTTTA ATACTGAGTG CAAAAGGTCA  4320
        CCCAAATTCC TATGATGAAA TTTTAAATTA ATGGGCACCT TTCAACATCA TTTGCTTCCT  4380
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Seq ID NO: C27 Protein Sequence
Protein Accession #: NP_005161.1

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MDGGTLPRSA PPAPPVPVGC AARRRPASPE LLRCSRRRRP ATAETGGGAA AVARRNERER   60
NRVKLVNLGF QALRQHVPHG GASKKLSKVE TLRSAVEYIR ALQRLLAEHD AVRNALAGGL  120
RPQAVRPSAP RGPPGTTPVA ASPSRASSSP GRGGSSEPGS PRSAYSSDDS GCEGALSPAE  180
RELLDFSSWL GGY                                                     193
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Seq ID NO: C28 DNA Sequence
Nucleic Acid Accession #: NM_017763
Coding sequence: 169..2520

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TAGTGGAAGC AGTATGTATG GTTGAAGTGC ATTGCTGCAG CTGGTAGCAT GAGTGGTGGC   180
CACCAGCTGC AGCTGGCTGC CCTCTGGCCC TGGCTGCTGA TGGCTACCCT GCAGGCAGGC   240
TTTGGACGCA CAGGACTGGT ACTGGCAGCA GCGGTGGAGT CTGAAAGATC AGCAGAACAG   300
AAAGCTGTTA TCAGAGTGAT CCCCTTGAAA ATGGACCCCA CAGGAAAACT GAATCTCACT   360
TTGGAAGGTG TGTTTGCTGG TGTTGCTGAA ATAACTCCAG CAGAAGGAAA ATTAATGCAG   420
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AGCATCGTCA AGCTGGAGAG TCCTCGACGG GCCCCCCGCC CCTGCCTGTC ACTGGCTAGC   540
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CGAGCTGCTG CTGAGCAGCT GCAGCAGCCG CTGGGGCTGA CCTGGCCAGT GGTGTTGATC   660
TGGGGTAATG ACGCTGAGAA GCTGATGGAG TTTGTGTACA AGAACCAAAA GGCCCATGTG   720
AGGATTGAGC TGAAGGAGCC CCCGGCCTGG CCAGATTATG ATGTGTGGAT CCTAATGACA   780
GTGGTGGGCA CCATCTTTGT GATCATCCTG GCTTCGGTGC TGCGCATCCG GTGCCGCCCC   840
CGCCACAGCA GGCCGGATCC GCTTCAGCAG AGAACAGCCT GGGCCATCAG CCAGCTGGCC   900
ACCAGGAGGT ACCAGGCCAG CTGCAGGCAG GCCCGGGGTG AGTGGCCAGA CTCAGGGAGG   960
AGCTGCAGCT CAGCCCCTGT GTGTGCCATC TGTCTGGAGG AGTTCTCTGA GGGGCAGGAG  1020
CTACGGGTCA TTTCCTGCCT CCATGAGTTC CATCGTAACT GTGTGGACCC CTGGTTACAT  1080
CAGCATCGGA CTTGCCCCCT CTGCGTGTTC AACATCACAG AGGGAGATTC ATTTCCCAG   1140
TCCCTGGGAC CCTCTCGATC TTACCAAGAA CCAGGTCGAA GACTCCACCT CATTCGCCAG  1200
CATCCCGGCC ATGCCCACTA CCACCTCCCT GCTGCCTACC TGTTGGGCCC TTCCCGGAGT  1260
GCAGTGGCTC GGCCCCCACG ACCTGGTCCC TTCCTGCCAT CCCAGGAGCC AGGCATGGGC  1320
CCTCGGCATC ACCGCTTCCC CAGAGCTGCA CATCCCCCGG CTCCAGGAGA GCAGCAGCGC  1380
CTGGCAGGAG CCCAGCACCC CTATGCACAA GGCTGGGGAA TGAGCCACCT CCAATCCACC  1440
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GACTCCAGCT CAGGGCCCTG TCATGGCTCT TCCAGTGACT CTGTGGTCAA CTGCACGGAC  1620
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CGCATGACAC CTTATCACCT CCCTCCTTGG GTGAGCTCTG AACACCAGCT TTGGCCCCTC  3000
CACAGTAAGG CTGCTACATC AGGGGCAACC CTGGCTCTAT CATTTTCCTT TTTTGCCAAA  3060
AGGACCAGTA GCATAGGTGA GCCCTGAGCA CTAAAAGGAG GGGTCCCTGA AGCTTTCCCA  3120
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AGAATAAGAA TAGTGGGGAG GGAAAAACTC CTCCTTGAAG ATTTCCTGTC TCAGAGTCCC  3240
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CCCATTTGGA ATGTGAATGT GGTGGCAAAG TGGGCAGAGG ACCCCACCTG GGAACCTTTT  3660
TCCCTCAGTT AGTGGGGAGA CTAGCACCTA GGTACCCACA TGGGTATTTA TATCTGAACC  3720
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Seq ID NO: C29 Protein Sequence
Protein Accession #: NP_004280.2

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TLPGTNLTGF LSPVDNHMRN LTSQDLLYDL DINIFDEINL MSLATEDNFD PIDVSQLFDE   120
PDSDSGLSLD SSHNNTSVIK SNSSHSVCDE GAIGYCTDHE SSSHHDLEGA VGGYYPEPSK   180
LCHLDQSDSD FHGDLTFQHV FHNHTYHLQP TAPESTSEPF PWPGKSQKIR SRYLEDTDRN   240
LSRDEQRAKA LHIPPSVDEI VGMPVDSFNS MLSRYYLTDL QVSLIRDIRR RGKNKVAAQN   300
CRKRKLDIIL NLEDDVCNLQ AKKETLKREQ AQCNKAINIM KQKLHDLYHD IFSRLRDDQG   360
RPVNPNHYAL QCTHDGSILI VPKELVASGH KKETQKGKRK                         400
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Seq ID NO: C30 DNA Sequence
Nucleic Acid Accession #: NM_004442
Coding sequence: 19..2982

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        TGGATGGTGC ATCCTCCATC AGGGTGGGAA GAGGTGAGTG GCTACGATGA GAACATGAAC   180
        ACGATCCGCA CGTACCAGGT GTGCAACGTG TTTGAGTCAA GCCAGAACAA CTGGCTACGG   240
        ACCAAGTTTA TCCGGCGCCG TGGCGCCCAC CGCATCCACG TGGAGATGAA GTTTTCGGTG   300
        CGTGACTGCA GCAGCATCCC CAGCGTGCCT GGCTCCTGCA AGGAGACCTT CAACCTCTAT   360
        TACTATGAGG CTGACTTTGA CTCGGCCACC AAGACCTTCC CCAACTGGAT GGAGAATCCA   420
        TGGGTGAAGG TGGATACCAT TGCAGCCGAC GAGAGCTTCT CCCAGGTGGA CCTGGGTGGC   480
        CGCGTCATGA AAATCAACAC CGAGGTGCGG AGCTTCGGAC CTGTGTCCCG CAGCGGCTTC   540
        TACCTGGCCT TCCAGGACTA TGGCGGCTGC ATGTCCCTCA TCGCCGTGCG TGTCTTCTAC   600
        CGCAAGTGCC CCCGCATCAT CCAGAATGGC GCCATCTTCC AGGAAACCCT GTCGGGGGCT   660
        GAGACGCACAT CGCTGGTGGC TGCCCGAGGC AGCTGCATCG CCAATGCGGA AGAGGTGGAT   720
        GTACCCATCA AGCTCTACTG TAACGGGGAC GGCGAGTGGC TGGTGCCCAT CGGGCGCTGC   780
        ATGTGCAAAG CAGGCTTCGA GGCCGTTGAG AATGGCACCG TCTGCCGAGG TTGTCCATCT   840
        GGGACTTTCA AGGCCAACCA AGGGGATGAG GCCTGTACCC ACTGTCCCAT CAACAGCCGG   900
        ACCACTTCTG AAGGGGCCAC CAACTGTGTC TGCCGCAATG GCTACTACAG AGCAGACCTG   960
        GACCCCCTGG ACATGCCCTG CACAACCATC CCCTCCGCGC CCCAGGCTGT GATTTCCAGT  1020
        GTCAATGAGA CCTCCCTCAT GCTGGAGTGG ACCCCTCCCC GCGACTCCGG AGGCCGAGAG  1080
        GACCTCGTCT ACAACATCAT CTGCAAGAGC TGTGGCTCGG GCCGGGGTGC CTGCACCCGC  1140
        TGCGGGGACA ATGTACAGTA CGCACCACGC CAGCTAGGCC TGACCGAGCC ACGCATTTAC  1200
        ATCAGTGACC TGCTGGCCCA CACCCAGTAC ACCTTCGAGA TCCAGGCTGT GAACGGCGTT  1260
        ACTGACCAGA GCCCCTTCTC GCCTCAGTTC GCCTCTGTGA ACATCACCAC CAACCAGGCA  1320
        GCTCCATCGG CAGTGTCCAT CATGCATCAG GTGAGCCGCA CCGTGGACAC CATTACCCTG  1380
        TCGTGGTCCC AGCCAGACCA GCCCAATGGC GTGATCCTGG ACTATGAGCT GCAGTACTAT  1440
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        ACAAGCATCC AGGAGAAGTT GCCACTCATC ATCGGCTCCT CGGCCGCTGG CCTGGTCTTC  1680
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        GACTCGGAGT ACACGGACAA GCTGCAACAC TACACCAGTG GCCACATGAC CCCCAGGCATG  1800
        AAGATCTACA TCGATCCTTT CACCTACGAG GACCCCAACG AGGCAGTGCG GGAGTTTGCC  1860
        AAGGAAATTG ACATCTCCTG TGTCAAAATT GAGCAGGTGA TCGGAGCAGG GGAGTTTGGC  1920
        GAGGTCTGCA GTGGCCACCT GAAGCTGCCA GGCAAGAGAG AGATCTTTGT GGCCATCAAG  1980
        ACGCTCAAGT CGGGCTCACAC GGAGAAGCAG CGCCGGGACT TCCTGAGCGA AGCCTCCATC  2040
        ATGGGCCAGT TCGACCATCC CAACGTCATC CACCTGGAGG GTGTCGTGAC CAAGAGCACA  2100
        CCTGTGATGA TCATCACCGA GTTCATGGAG AATGGCTCCC TGGACTCCTT TCTCCGGCAA  2160
        AACGATGGGC AGTTCACAGT CATCCAGCTG GTGGGCATGC TTCGGGGCAT CGCAGCTGGC  2220
        ATGAAGTACC TGGCAGACAT GAACTATGTT CACCGTGACC TGGCTGCCCG CAACATCCTC  2280
        GTCAACAGCA ACCTGGTCTG CAAGGTGTCG GACTTTGGGC TCTCACGCTT TCTAGAGGAC  2340
        GATACCTCAG ACCCCACCTA CACCAGTGCC CTGGGCGGAA AGATCCCCAT CCGCTGGACA  2400
        GCCCCGGAAG CCATCCAGTA CCGGAAGTTC ACCTCGGCCA GTGATGTGTG GAGCTACGGC  2460
        ATTGTCATGT GGGAGGTGAT GTCCTATGGG GAGCGGCCCT ACTGGGACAT GACCAACCAG  2520
        GATGTAATCA ATGCCATTGA GCAGGACTAT CGGCTGCCAC CGCCCATGGA CTGCCCGAGC  2580
        GCCCTGCACC AACTCATGCT GGACTGTTGG CAGAAGGACC GCAACCACCG GCCCAAGTTC  2640
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        GCGCCCCTCT CCTCTGGCAT CAACCTGCCG CTGCTGGACC GCACGATCCC CGACTACACC  2760
        AGCTTTAACA CGGTGGACGA GTGGCTGGAG GCCATCAAGA TGGGGCAGTA CAAGGAGAGC  2820
        TTCGCCAATG CCGGCTTCAC CTCCTTTGAC GTCGTGTCTC AGATGATGAT GGAGGACATT  2880
        CTCCGGGTTG GGCTCACTTT GGCTGGCCAC CAGAAAAAAA TCCTGAACAG TATCCAGGTG  2940
        ATGCGGGCGC AGATGAACCA GATTCAGTCT GTGGAGGTTT GACATTCACC TGCCTCGGCT  3000
        CACCTCTTCC TCCAAGCCCC GCCCCCTCTG CCCCACGTGC CGGCCCTCAT GGTGCTCTAT  3060
        CCACTGCAGG GCCAGCCACT CGCCAGGAGG CCACGGGCCA CGGGAAGAAC CAAGCGGTGC  3120
        CAGCCACGAG ACGTCACCAA GAAAACATGC AACTCAAACG ACGGAAAAAA AAAGGGAATG  3180
        GGAAAAAAGA AAACAGATCC TGGGAGGGGG CGGGAAATAC AAGGAATATT TTTTAAAGAG  3240
        GATTCTCATA AGGAAAGCAA TGACTGTTCT TGCGGGGGAT AAAAAAGGGC TTGGGAGATT  3300
        CATGCGATGT GTCCAATCGG AGACAAAAGC AGTTTCTCTC CAACTCCCTC TGGGAAGGTG  3360
        ACCTGGCCAG AGCCAAGAAA CACTTTCAGA AAAACAAATG TGAAGGGGAG AGACAGGGGC  3420
        CGCCCTTGGC TCCTGTCCCT GCTGCTCCTC TAGGCCTCAC TCAACAACCA AGCGCCTGGA  3480
        GGACGGGACA GATGGACAGA CAGCCACCCT GAGAACCCCT CTGGGAAAAT CTATTCCTGC  3540
        CACCACTGGG CAAACAGAAG AATTTTTCTG TCTTTGGAGA GTATTTTAGA AACTCCAATG  3600
        AAAGACACTG TTTCTCCTGT TGGCTCACAG GGCTGAAAGG GGCTTTTGTC CTCCTGGGTC  3660
        AGGGAGAACG CGGGGACCCC AGAAAGGTCA GCCTTCCTGA GGATGGGCAA CCCCAGGTCT  3720
        GCAGCCTCCAG GTACATATCA CGCGCACAGC CTGGCAGCCT GGCCCTCCTG GTGCCCACTC  3780
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        TTTATATGCA CATTTCTGGA TTTTTTTATA CGGTTTTCAT TGACACTCTT CCCTCCTCCC  4140
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        ACTGTTGATG AAAGGGACAG ATTGAGGAGG AAGTGGGCTC TGAGGCTGCA GGGCTGGAAG  4320
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        CCCTTTGAGG CTCCTGAGTG CCCTCAGATG GTCAAAACCC AGTTTCCCT CTGGGAGCCT  4440
        AAACCAGGCT GCATCGGAGG CCAGGACCCG GATCATTCAC TGTGATACCC TGCCCTCCAG  4500
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        ACCCAAGCAG AGCAATCAGT TAGTGAATTG GAATTCCCCA AGTCTTTGCT ATTGTGAATA  4740
        GTGCTGCAAT AAACATACGT GTGCATGTGT CTTTATAGTA GAATGATCTA TAATCCTCTG  4800
        GGTATGTACC CAGTAATGGG ATTGCTGGGT CAAATGGTTT TTCTGGTTCT AGATCCTTGA  4860
        GGAATTGCCA CACTGTCTTT CACAATGGTT GAACTAATTT ACACTCCTAC CAACAGTGTA  4920
        AAAGTCTTCC TGTTTCTCCA CATCCTCTCC AGCATCTGTT GTTTCCTGAC TTTTTAATGA  4980
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1216

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TGAGAAGTGT CTGTTCATAA CCTTCACCAA TTTTTGATGA GGTTGTTTGT TCTTTTCTTG   5160
TAAACTTAAT GAAATAAAGC ATGAAGACAA GATTAGAAGA AAAAGAATGA AAAGGAACAA   5220
ACAAAGCGTC CAAGAAATAT GGGACTATGT GACAAGAACA AACTTACGTT TGACTGGTGT   5280
GCTGAAAATG ACAGGGAGAA TGAAACCAAG TTGGAAAACA CTCTTCAGGA TATTATCCAG   5340
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CCCAAAGATA TTTCTCGAGA AGAGCAACCC GAAGACACAT AATTGTCAGA TTCACCAAGG   5460
TTGAAATGAA GGAAAAAATG CTAAGGGCAG CCAGAGAGAA AGGTCAGGTT ACTCACAAAA   5520
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GGGGACCAAT ATTCAACATT CACAAAGAAA AGAATTTTCA ATCCAGAATT TCATATCCAG   5640
CCAAACTAAG CTTCATAAGC AAAGGAGAAA TAAAATCCTT TACGACAAG CAAATCCTGG    5700
GAGATTTTGT CACCACCAGG CCTGCCTTAC AAGACATCCT GAAGGAAGCA CTAAATATGG   5760
AAAAGAAAAA CTGGTGCCAA CCACTGCAAA AAATACCAAA TTGTAGAGAC CATTGACACT   5820
ATGAAGAAAC CGTGTCAACT AATGGGCAAA ATAACCAGCT AGTATCATAA TGACAGGATC   5880
AGATTCACAC ATAACAATAT TAACCTTATA TCTAAATGGG CTAAATCCCC CAATTAAAAG   5940
ACGCAGACTG GCAAATTGGT TAAAGAGTCA AGACTCATTG GTGTGCCGTA TTCAGGAGAC   6000
CCATCTCACG TGCAAAGACA CACATAGGCT CAGAGTAAAA GGGATACAGG GGAATTC      6057
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Seq ID NO: C31 DNA Sequence
Nucleic Acid Accession #: NM_031942.1
Coding sequence: 145..1260

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TGCTCCTCCT GCTGTGGGAC CGCTGACCGC GCGGCTGCTC CGCTCTCCCG GCTCCAAGCG   120
CCGATCTGGG CACCCGCCAC CAGCATGGAC GCTCGCCGCG TGCCGCAGAA AGATCTCAGA   180
GTAAAGAAGA ACTTAAAGAA ATTCAGATAT GTGAAGTTGA TTTCCATGGA AACCTCGTCA   240
TCCTCTGATG ACAGTTGTGA CAGCTTTGCT TCTGATAATT TTGCAAACAC GAGGCTGCAG   300
TCAGTTCGGG AAGGCTGTAG GACCCGCAGC CAGTGCAGGC ACTCTGACC TCTCAGGGTG    360
GCGATGAAGT TTCCAGCGCG GAGTACCAGG GGAGCAACCA ACAAAAAGAC AGAGTCCCGC   420
CAGCCCTCAG AGAATTCTGT GACTGATTCC AACTCCGATT CAGAAGATGA AAGTGGAATG   480
AATTTTTTGG AGAAAAGGGC TTTAAATATA AAGCAAAACA AAGCAATGCT TGCAAAACTC   540
ATGTCTGAAT TAGAAAGCTT CCCTGGCTCG TTCCGTGGAA GACATCCCCT CCCAGGCTCC   600
GACTCACAAT CAAGGAGACC GCGAAGGCGT ACATTCCCGG GTGTTGCTTC CAGGAGAAAC   660
CCTGAACGGA GAGCTCGTCC TCTTACCAGG TCAAGGTCCC GGATCCTCGG GTCCCTTGAC   720
GCTCTACCCA TGGAGGAGGA GGAGGAAGAG GATAAGTACA TGTTGGTGAG AAAGAGGAAG   780
ACCGTGGATG GCTACATGAA TGAAGATGAC CTGCCCAGAA GCCGTGCGTC CAGATCATCC   840
GTGACCCTTC CGCATATAAT TCGCCCAGTG GAAGAAATTA CAGAGGAGGA GTTGGAGAAC   900
GTCTGCAGCA ATTCTCGAGA GAAGATATAT AACCGTTCAC TGGGCTCTAC TTGTCATCAA   960
TGCCGTACAGA AGACTATTGA TACCAAAACA AACTGCAGAA ACCCAGACTG CTGGGGCGTT   1020
CGAGGCCAGT TCTGTGTGCCC CTGCCTTCGA AACCGTTATG GTGAAGAGGT CAGGGATGCT   1080
CTGCTGGATC CGAACTGGCA TTGCCCGCCT TGTCGAGGAA TCTGCAACTG CAGTTTCTGC   1140
CGGCACGAG ATGGACGGTG TGCGACTGGG GTCCTTGTGT ATTTAGCCAA ATATCATGGC    1200
TTTGGGAATG TGCATGCCTA CTTGAAAAGC CTGAAACAGG AATTTGAAAT GCAAGCATAA   1260
TATCTGGAAA ATTTGCTGCC TGCCTTCTAC TTCTCAAATC TTTCTTGTAA AAGTTTCCAA   1320
TTTTTTCACT GAAACCTGAG TTAAAAATCT TGATGATCAG CCTGTTTCAT AAGAAACTCC   1380
AATCAAGTTA ATCTTAGCAG ACATGTGTTT CTGGAGCATC ACAGAAGGTA TATTGCTAGT   1440
TACACTTTGC CCTCCTGCAG TTTCTTCTCT GCTCCCAACC CCCATCTCAT AGCATCCCCC   1500
TCTATTTCCA ATGCTCCTCT CCAACCGCTT AGTTTCTGAA TTTCTTTTAA ATTACAGTTT   1560
TATGAAAGCA TATTTTATTT ACTTGGTGTT GAAATAGCCC TCATAAACC TAAGCACTTG    1620
GAAACACAAT AATAGTATTA ACTAACTAGA TCTATTGAAT TTCAGAGAAG AGCCTTCTAA   1680
CTTGTTTACA CAAAAACGAG TATGATTTAG CACTCATACT AGTTGAAATT TTTAATAGAA   1740
TCAAGGCACA AAAGTCTTAA AACCATGTGG AAAAATTAGG TAATTATTGC AGATTGATGT   1800
CTCTCAATCC CATGTATTGC GCTTATGTTA CAAGTTGTTG TCACAGTTGA GACTTAATTT   1860
CTCCTAATTT CTTCTGCCCG AAGGGTAAGT GGTGCGTCCA GCTTACACGA TCATAATTCA   1920
AAGGTTGGTG GGCAATGTAA TACTTAATTA AAATAATGAT GGAAGAGCTA TCTGGAGATT   1980
ATGAGTAAGC TGATTTGAAT TTTCAGTATA AAACTTTAGT ATAATTGTAG TTTGCAAAGT   2040
TTATTTCAGT TCACATGTAA GGTATTGCAA ATAAAATTCTT GGACAATTTT GTATGGAAAC   2100
TTGATATTAA AAACTAGTCT GTGGTTCTTT GCAGTTTCTT GTAAATTTAT AAACCAGGCA   2160
CAAGGTTCAA GTTTAGATTT TAAGCACTTT TATAACAATG ATAAGTGCCT TTTTGGAGAT   2220
GTAACTTTTA GCAGTTTGTT AACCTGACAT CTCTGCCAGT CTAGTTTCTG GGCAGGTTTC   2280
CTGTGTCAGT ATTCCCCCTC CTCTTTGCAT TAATCAAGGT ATTTGGTAGA GGTGGAATCT   2340
AAGTGTTTGT ATGTCCAATT TACTTGCATA TGTAAACCAT TGCTGTGCCA TTCAATGTTT   2400
GATGCATAAT TGGACCTTGA ATCGATAAGT GTAAATACAG CTTTTGATCT GTAATGCTTT   2460
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Seq ID NO: C32 DNA Sequence
Nucleic Acid Accession #: NM_012445.1
Coding sequence: 276..1271

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TCTCGCTGGA GGCCAGGCCG TGCAGCATCG AAGACAGGAG GAACTGGAGC CTCATTGGCC   180
GGCCCGGGGC GCCGGCCTCG GGCTTAAATA GGAGCTCCGG GCTCTGGCTG GGACCCGACC   240
GCTGCCGGCC GCGCTCCCGC TGCTCCTGCC GGGTGATGGA AAACCCCAGC CCGGCCGCCG   300
CCCTGGGCAA GGCCCTCTGC GCTCTCCTCC TGGCCACTCT CGGCGCCGCG GGCCAGCCTC   360
TTGGGGGAGA GTCCATCTGT TCCGCCAGAG CCCCGGCCAA ATACAGCATC ACCTTCACGG   420
GCAAGTGGAG CCAGACGGCC TTCCCCAAGC AGTACCCCCT GTTCCGCCCC CCTGCGCAGT   480
GGTCTTGCGT GCTGGGGGCC GCGCATAGCT CCGACTACAG CATGTGGAGG AAGAACCAGT   540
ACGTCAGTAA CGGGCTGCGC GACTTTGCGG AGCGCGGCGA GGCCTGGGCG CTGATGAAGG   600
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     AGATCGAGGC GGCGGGGGAG GCGCTGCAGA GCGTGCACGC GGTGTTTTCG GCGCCCGCCG   660
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     TCTCGTTTGT GGTGCGCATC GTGCCCAGCC CCGACTGGTT CGTGGGCGTG GACAGCCTGG   780
     ACCTGTGCGA CGGGGACCGT TGGCGGGAAC AGGCGGCGCT GGACCTGTAC CCCTACGACG   840
     CCGGGACGGA CAGCGGCTTC ACCTTCTCCT CCCCCAACTT CGCCACCATC CCGCAGGACA   900
     CGGTGACCGA GATAACGTCC TCCTCTCCCA GCCACCCGGC CAACTCCTTC TACTACCCGC   960
     GGCTGAAGGC CCTGCCTCCC ATCGCCAGGG TGACACTGGT GCGGCTGCGA CAGAGCCCCA  1020
     GGGCCTTCAT CCCTCCCGCC CCAGTCCTGC CCAGCAGGGA CAATGAGATT GTAGACAGCG  1080
     CCTCAGTTCC AGAAACGCCG CTGGACTGCG AGGTCTCCCT GTGGTCGTCC TGGGGACTGT  1140
     GCGGAGGCCA CTGTGGGGAGG CTCGGGACCA AGAGCAGGAC TCGCTACGTC CGGGTCCAGC  1200
     CCGCCAACAA CGGGAGCCCC TGCCCCGAGC TCGAAGAAGA GGCTGAGTGC GTCCCTGATA  1260
     ACTGCGCTTA AGACCAGAGC CCCGCAGCCC CTGGGGCCCC CGGAGCCATG GGGTGTCGGG  1320
     GGCTCCTGTG CAGGCTCATG CTGCAGGCGG CCGAGGCACA GGGGGTTTCG CGCTGCTCCT  1380
     GACCGCGGTG AGGCCGCGCC GACCATCTCT GCACTGAAGG GCCCTCTGGT GGCCGGCACG  1440
     GGCATTGGGA AACAGCCTCC TCCTTTCCCA ACCTTGCTTC TTAGGGGCCC CCGTGTCCCG  1500
     TCTGCTCTCA GCCTCCTCCT CCTGCAGGAT AAAGTCATCC CCAAGGCTCC AGCTACTCTA  1560
     AATTATGGTC TCCTTATAAG TTATTGCTGC TCCAGGAGAT TGTCCTTCAT CGTCCAGGGG  1620
     CCTGGCTCCC ACGTGGTTGC AGATACCTCA GACCTGGTGC TCTAGGCTGT GCTGAGCCCA  1680
     CTCTCCCGAG GGGCATCCA AGCGGGGGCC ACTTGAGAAG TGAATAAATG GGGCGGTTTC  1740
     GGAAGCGTCA GTGTTTCCAT GTTATGGATC TCTCTGCGTT TGAATAAAGA CTATCTCTGT  1800
     TGCTCAC                                                            1807
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Seq ID NO: C33 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1314

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     TACTTCCTGTC GCGGGCAGCC TCTCCACTTC ATCCCGAGGA AGCAGCTGTG TGACGGAGAG  240
     CTGGACTGTG CCTTGGGGGA GGACGAGGAG CACTGTGTCA AGAGCTTCCC CGAAGGGCCT  300
     GCAGTGGCAG TCCGCCTCTC CAAGGACCGA TCCACACTGC AGGTGCTGGA CTCGGCCACA  360
     GGGAACTGGT TCTCTGCCTG TTTCGACAAC TTCACAGAAG CTCTCGCTGA GACAGCCTGT  420
     AGGCAGATGG GCTACAGCAG CAAACCCACT TTCAGAGCTG TGGAGATTGG CCCAGACCAG  480
     GATCTGGATG TTGTTGAAAT CACAGAAAAC AGCCAGGAGC TTCGCATGCG GAACTCAAGT  540
     GGGCCCTGTC TCTCAGGCTC CCTGGTCTCC CTGCACTGTC TTGCCTGTGG GAAGAGCCTG  600
     AAGACCCCCC GTGTGGTGGG TGGGGAGGAG GCCTCTGTGG ATTCTTGGCC TTGGCAGGTC  660
     AGCATCCAGT ACGACAAACA GCACGTCTGT GGAGGGAGCA TCCTGGACCC CCACTGGGTC  720
     CTCACGGCAG CCCACTGCTT CAGGAAACAT ACCGATGTGT TCAACTGGAA GGTGCGGGCA  780
     GGCTCAGACA AACTGGGCAG CTTCCCATCC CTGGCTGTGG CCAAGATCAT CATCATTGAA  840
     TTCAACCCCA TGTACCCCAA AGACAATGAC ATCGCCCTCA TGAAGCTGCA GTTCCCACTC  900
     ACTTTCTCAG GCACAGTCAG GCCCATCTGT CTGCCCTTCT TTGATGAGGA GCTCACTCCA  960
     GCCACCCCAC TCTGGATCAT TGGATGGGGC TTTACGAAGC AGAATGGAGG GAAGATGTCT  1020
     GACATACTGC TGCAGGCGTC AGTCCAGGTC ATTGACAGCA CACGGTGCAA TGCAGACGAT  1080
     GCGTACCAGG GGGAAGTCAC CGAGAAGATG ATGTGTGCAG GCATCCCGGA AGGGGGTGTG  1140
     GACAACTGCC AGGGTGACAG TGGTGGGCCC CTGATGTACC AATCTGACCA GTGGCATGTG  1200
     GTGGGCATCG TTAGCTGGGG CTATGGCTGC GGGGGCCCCA GCACCCCAGG AGTATACACC  1260
     AAGGTCTCAG CCTATCTCAA CTGGATCTAC AATGTCTGGA AGGCTGAGCT GTAA        1314
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Seq ID NO: C34 DNA Sequence
Nucleic Acid Accession #: NM_003045.1
Coding sequence: 148..2037

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     CAGATGCTGC GGCGGAAGGT GGTGGACTGT AGCCGGGAGG AGACGCGGCT GTCTCGCTGC  240
     CTGAACACTT TTGATCTGGT GGCCCTCGGG GTGGGCAGCA CACTGGGTGC TGGTGTCTAC  300
     GTCCTGGCTG GAGCTGTGGC CCGTGAGAAT GCAGGCCCTG CCATTGTCAT CTCCTTCCTG  360
     ATCGCTCGC TGGCCTCAGT GCTGGCTGGC CTGTGCTATG GCGAGTTTGG TGCTCGGGTC  420
     CCCAAGACGG GCTCAGCTTA CCTCTACAGC TATGTCACCG TTGGAGAGCT CTGGGCCTTC  480
     ATCACCGGCT GGAACTTAAT CCTCTCCTAC ATCATCGGTA CTTCAAGCGT AGCGAGGGCC  540
     TGGAGCGCCA CCTTCGACGA GCTGATAGGC AGACCCATCG GGGAGTTCTC ACGGACACAC  600
     ATGACTCTGA ACGCCCCCGG CGTGCTGGCT GAAAACCCCG ACATATTCGC AGTGATCATA  660
     ATTCTCATCT TGACAGGACT TTTAACTCTT GGTGTGAAAG AGTCGGCCAT GGTCAACAAA  720
     ATATTCACTT GTATTAACGT CCTGGTCCTG GGCTTCATAA TGGTGTCAGG ATTTGTGAAA  780
     GGATCGGTTA AAAACTGGCA GCTCACGGAG GAGGATTTTG GGAACACATC AGGCCGTCTC  840
     TGTTTGAACA ATGCACAAA AGAAGGGAAG CCCGGTGTTG GTGGATTCAT GCCCTTCGGG  900
     TTCTCTGGTG TCCTGTCGGG GGCAGCGACT TGCTTCTATG CCTTCGTGGG CTTTGACTGC  960
     ATCGCCACCA CAGGTGAAGA GGTGAAGAAC CCACAGAAGG CCATCCCCGT GGGGATCGTG  1020
     GCGTCCCTCT TGATCTGCTT CATCGCCTAC TTTGGGGTGT CGGCTGCCCT CACGCTCATG  1080
     ATGCCCTACT TCTGCCTGGA CAATAACAGC CCCCTGCCCG ACGCCTTTAA GCACGTGGGC  1140
     TGGGAAGGTG CCAAGTACGG AGTGGCCGTG GGCTCCCTCT GCGCTCTTTC CGCCAGTCTT  1200
     CTAGGTTCCA TGTTTCCCAT GCCTCGGGTT ATCTATGCCA TGGCTGAGGA TGGACTGCTA  1260
     TTTAAATTCT TAGCCAACGT CAATGATAGG ACCAAAACAC CAATAATCGC CACATTAGCC  1320
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     TACCAGCCAG AGCAGCCTAA CCTGGTATAC CAGATGGCCA GTACTTCCGA CGAGTTAGAT  1500
     CCAGCAGACC AAAATGAATT GGCAAGCACC AATGATTCCC AGCTGGGGTT TTTACCAGAG  1560
     GCAGAGATGT CTCTTTGAA AACCATACTC TCACCCAAAA ACATGGAGCC TTCCAAAATC  1620
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TCTGGGCTAA TTGTGAACAT TTCAACCAGC CTTATAGCTG TTCTCATCAT CACCTTCTGC   1680
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CTCGCAGGGT CTGCCCTCCT CTGTGCCGTG GTCACGGGCG TCATCTGGAG GCAGCCCGAG   1800
AGCAAGACCA AGCTCTCATT TAAGGTTCCC TTCCTGCCAG TGCTCCCCAT CCTGAGCATC   1860
TTCGTGAACG TCTATCTCAT GATGCAGCTG GACCAGGGCA CCTGGGTCCG GTTTGCTGTG   1920
TGGATGCTGA TAGGCTTCAT CATCTACTTT GGCTATGGCC TGTGGCACAC CGAGGAGGCG   1980
TCCCTGGATG CCGACCAAGC AAGGACTCCT GACGGCAACT TGGACCAGTG CAAGTGGCAC   2040
ACAGCCCCGC CCCCCGGAGG TGGCAGCAGC CCCGAGGGAC GCCCCCAGAG GACCGGGAGG   2100
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Seq ID NO: C35 DNA Sequence
Nucleic Acid Accession #: NM_002776.1
Coding sequence: 82..912

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GCCCGGGCTC TGGCGAAGCT GCTGCCGCTG CTGATGGCGC AACTCTGGGC CGCAGAGGCG   180
GCGCTGCTCC CCCAAAACGA CACGCGCTTG GACCCCGAAG CCTATGGCGC CCCGTGCGCG   240
CGCGGCTCGC AGCCCTGGCA GGTCTCGCTC TTCAACGGCC TCTCGTTCCA CTGCGCGGGT   300
GTCCTGGTGG ACCAGAGTTG GGTGCTGACG GCCGCGCACT GCGGAAACAA GCCACTGTGG   360
GCTCGAGTAG GGGATGATCA CCTGCTGCTT CTTCAGGGCG AGCAGCTCCG CCGGACGACT   420
CGCTCTGTTG TCCATCCCAA GTACCACCAG GGCTCAGGCC CCATCCTGCC AAGGCGAACG   480
GATGAGCACG ATCTCATGTT GCTAAAGCTG GCCAGGCCCG TAGTGCCGGG GCCCCGCGTC   540
CGGGCCCTGC AGCTTCCCTA CCGCTGTGCT CAGCCCGGAG ACCAGTGCCA GGTTGCTGGC   600
TGGGGCACCA CGGCCGCCCG GAGAGTGAAG TACAACAAGG GCCTGACCTG CTCCAGCATC   660
ACTATCCTGA GCCCTAAAGA GTGTGAGGTC TTCTACCCTG GCGTGGTCAC CAACAACATG   720
ATATGTGCTG GACTGGACCG GGGCCAGGAC CCTTGCCAGA GTGACTCTGG AGGCCCCCTG   780
GTCTGTGACG AGACCCTCCA AGGCATCCTC TCGTGGGGTG TTTACCCCTG TGGCTCTGCC   840
CAGCATCCAG CTGTCTACAC CCAGATCTGC AAATACATGT CCTGGATCAA TAAAGTCATA   900
CGCTCCAACT GATCCAGATG CTACGCTCCA GCTGATCCAG ATGTTATGCT CCTGCTGATC   960
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CTGGGGTCAC CCAACCTGAC TTCCTCTGCC ACTCCCCGCT GTGTGACTTT GGGCAAGCCA   1260
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TCTTAGACAT GTTGTGAGGA GACTATGATA TAACATGTGT ATGTAAATCT TCATGTGATT   1380
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Seq ID NO: C36 DNA Sequence
Nucleic Acid Accession #: XM_095088
Coding sequence: 1..4074

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GAGCTGCCAA GCGGGGTGCT GGAGGGCCTG AGCCAGCGGC GCGGGCCGCA GCCGGGAGCA   240
GCTGTACGCT CCGCCGAGG CGGCGCAGTG CCCCGCGGGG CCCGAGCGGT TCCAGAGCGC   300
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CAAGCCTTTA GCCGCTCCTC AACACTTGCT AACCACAAGA GAATTCATAC TGGAGAGAAA  3720
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AAGAGAATTC ATACTGGAGA GAAACCCTAC ACATGTGAAG AATGTGGCAA AGCCTTTAAC  3840
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Seq ID NO: C37 DNA Sequence
Nucleic Acid Accession #: NM_032044
Coding sequence: 182..658

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GATGGCTTCC AGAAGCATGC GGCTGCTCCT ATTGCTGAGC TGCCTGGCCA AAACAGGAGT  240
CCTGGGTGAT ATCATCATGA GACCCAGCTG TGCTCCTGGA TGGTTTTACC ACAAGTCCAA  300
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CACTCAACTC CTGCTTGTTT TTCCTTTGGC CATAGGAAGG TTTACCAGTA GAATCCTTGC  1140
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Seq ID NO: C38 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 52..3042

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CCCAAACTCA CAGTCACCAT TGACACCAAT GTGAACAGCA CCATTCTGAA CTTGGAGGAT  240
AATGTACAGT CATGGAAACC TGGAGATACC CTGGTCATTG CCAGTACTGA TTACTCCATG  300
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AAGTTTGCTC TGGGATTTAA GGCAGCACAC TTGGAGGGCA CGGACTGAA GCATATGGGA   600
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      TCCAAGCAAG AGATAAAGAA CAGCTTGTTT GTTGGCGAGA GTGGCAACGT GGGGACGGAA   1500
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65    ATAGAGAGCC AAAGAGCTC CTGTAAGAGG GAGAACTCTA TCTGTGGTTT ATAATCTTGC   4920
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Seq ID NO: C39 DNA Sequence
Nucleic Acid Accession #: NM_014373
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     AAATAACATA ATTGAAGGCA GTAAAAGTGA AATTAAATAG GAAGATCATC AGTCAAGGAA   240
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Seq ID NO: C40 DNA Sequence
Nucleic Acid Accession #: BC012089
Coding sequence: 1..2571

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     AGTCGGAAAC TGGCAGATAG CAATTTCAAG GACTTGCGAA CTCTCTTGAA TGAAACTCCA   600
     GAGCAAATCA AATATATATT GGCCCAGTAC AACACTACCA AGGACAAGGC GTTCACAGAT   660
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Seq ID NO: C41 DNA Sequence

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Nucleic Acid Accession #: NM_033049
Coding sequence: 28..1566

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         GGTCCCAGCA ATCCTTGCCA AGATGATCCC TGTGCAGATA ATTCGTTATG TGTTAAGCTG   600
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Seq ID NO: C42 DNA Sequence
Nucleic Acid Accession #: NM_001432.1
Coding sequence: 167..676

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     AACTAGTACT CAAGGTTTAA CCTTAAAATT AAGATTTCCT TAACCTTAAC CTTAAAATTG   3840
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Seq ID NO: C43 DNA Sequence
Nucleic Acid Accession #: AF011468.1
Coding sequence: 257..1468

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     CAAGTTTATT CTGGCTCTTA AAGTGTTATT TAAAGCTCAG CTGGAGAAAG CCGGAGTGGA   780
     GCATCAGCTC AGAAGAGAAG TAGAAATACA GTCCCACCTT CGGCATCCTA ATATTCTTAG   840
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     TTATATAACA GAATTGGCAA ATGCCCTGTC TTACTGTCAT TCGAAGAGAG TTATTCATAG   1020
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      GGCATTCCTT TAGGAATGCT GTGTGTCTGT CCGGCACCCC GGTAGGCCTG ATTGGGTTTC   2040
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15    ACCTCCATTT AGGGATTTGC TTGGGATACA GAAGAGGCCA TGTGTCTCAG AGCTGTTAAG   2160
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20    Seq ID NO: C44 DNA Sequence
      Nucleic Acid Accession #: NM_013372
      Coding sequence: 63..617
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      AGCACAATGA CTCAGAGCAG ACTCAGTCGC CCCAGCAGCC TGGCTCCAGG AACCGGGGGC   240
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45    ATCTCTTGTT TGCCAAGGTT CCTAAATTAA TTCACTTAAC CATGATGCAA ATGTTTTTCA   1200
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55    GCCTCTGCTG AGTGTACCTG ACAGTAAGTC TAAAGATGAR AGAGTTTAGG GACTACTCTG   1800
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      GGTGTTAATA CCTGGTAGAA ATGTAAGGGA TATGACCTCC CTTTCTTTAT GTGCTCACTG   1980
      AGGATCTGAG GGGACCCTGT TAGGAGAGCA TAGCATCATG ATGTATTAGC TGTTCATCTG   2040
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      TCTGATTAAA CTTGGCCTAC TGGCAATGGC TACTTAGGAT TGATCTAAGG GCCAAAGTGC   2160
      AGGGTGGGTG AACTTTATTG TACTTTGGAT TTGGTTAACC TGTTTTCTTC AAGCCTGAGG   2220
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      AGTCCTATGT AATATGGAAA ACAAACACTG CAGACTTGAG ATTCAGTTGC CGATCAAGGC   2340
65    TCTGGCATTC AGAGAACCCT TGCAACTCGA GAAGCTGTTT TTATTTCGTT TTTGTTTTGA   2400
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      ACACCCAAAA TGTTGGGTCT GATTTTCAAA CTTTTAAACT CACTACTGAT GATTCTCACG   2520
      CTAGGCGAAT TTGTCCAAAC ACATAGTGTG TGTGTTTTGT ATACACTGTA TGACCCCACC   2580
      CCAAATCTTT GTATTGTCCA CATTCTCCAA CAATAAAGCA CAAGTGGAT TTAATTAAGC   2640
70    ACACAAATGC TAAGGCAGAA TTTTGAGGGT GGGAGAGAAG AAAAGGGAAA GAAGCTGAAA   2700
      ATGTAAAACC ACACCAGGGA GGAAAAATGA CATTCAGAAC CAGCAAACAC TGAATTTCTC   2760
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      AGCAGTAATC TTCTTTTAGG AGCTTGTACC ACAGTCTTGC ACATAAGTGC AGATTTGGCT   2880
      CAAGTAAAGA GAATTTCCTC AACACTAACT TCACTGGGAT AATCAGCAGC GTAACTACCC   2940
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      GACTAGTACA AATGTGGTGT GTCTTCCAAC TTTCATTGAA AATGCCATAT CTATACCATA   3060
      TTTTATTCGA GTCACTGATG ATGTAATGAT ATATTTTTTC ATTATTATAG TAGAATATTT   3120
      TTATGGCAAG ATATTTGTGG TCTTGATCAT ACCTATTAAA ATAATGCCAA ACACCAAATA   3180
      TGAATTTTAT GATGTACACT TTGTGCTTGG CATTAAAAGA AAAAAACACA CATCCTGGAA   3240
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      TGGAGGAGAG GATAATTTCC ACTGTGTGGA ATGTGAATAG TTAAATGAAA AGTTATGGTT   3360
      ATTTAATGTA ATTATTACTT CAAATCCTTT GGTCACTGTG ATTTCAAGCA TGTTTTCTTT   3420
      TTCTCCTTTA TATGACTTTC TCTGAGTTGG GCAAAGAAGA AGCTGACACA CCGTATGTTG   3480
      TTAGAGTCTT TTATCTGGTC AGGGGAAACA AAATCTTGAC CCAGCTGAAC ATGTCTTCCT   3540
      GAGTCAGTGC CTGAATCTTT ATTTTTTAAA TTGAATGTTC CTTAAAGGTT AACATTTCTA   3600
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AGTTCTATTG ACATTCCTCA AGATATTTAA TATCAACTGC ATTATGTATT ATGTCTGCTT    3840
AAATCATTTA AAAACGGCAA AGAATTATAT AGACTATGAG GTACCTTGCT GTGTAGGAGG    3900
ATGAAAGGGG AGTTGATAGT CTCATAAAAC TAATTTGGCT TCAAGTTTCA TGAATCTGTA    3960
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Seq ID NO: C45 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 200..2932

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TCCCTCGAGT TCTGGTGTGA AGAGATAAAT CACCAGTCAC AGACTATGCA CCCGACTGCT    180
GCTGTTCAGT CCAGGGAAAA TGAAAGTTGG AGTGCTGTGG CTCATTTCTT TCTTCACCTT    240
CACTGACGGC CACGGTGGCT TCCTGGGGAA AAATGATGGC ATCAAAACAA AAAAAGAACT    300
CATTGTGAAT AAGAAAAAAC ATCTAGGCCC AGTCGAAGAA TATCAGCTGC TGCTTCAGGT    360
GACCTATAGA GATTCCAAGG AGAAAAGAGA TTTGAGAAAT TTTCTGAAGC TCTTGAAGCC    420
TCCATTATTA TGGTCACATG GGCTAATTAG AATTATCAGA GCAAAGGCTA CCACAGACTG    480
CAACAGCCTG AATGGAGTCC TGCAGTGTAC CTGTGAAGAC AGCTACACCT GGTTTCCTCC    540
CTCATGCCTT GATCCCCAGA ACTGCTACCT TCACACGGCT GGAGCACTCC CAAGCTGTGA    600
ATGTCATCTC AACAACCTCA GCCAGAGTGT CAATTTCTGT GAGAGAACAA AGATTTGGGG    660
CACTTTCAAA ATTAATGAAA GGTTTACAAA TGACCTTTTG AATTCATCTT CTGCTATATA    720
CTCCAAATAT GCAAATGGAA TTGAAATTCA ACTTAAAAAA GCATATGAAA GAATTCAAGG    780
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GCGGGAAGAA AAGTATGCCA GCTCACGGTT ACTAGAGACA TTAGAAAACA TCAGCACTCT    1440
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Seq ID NO: C46 DNA Sequence
Nucleic Acid Accession #: NM_000584.1
Coding sequence: 75..374

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CTGCAGCTCT GTGTGAAGGT GCAGTTTTGC CAAGGAGTGC TAAAGAACTT AGATGTCAGT    180
GCATAAAGAC ATACTCCAAA CCTTTCCACC CCAAATTTAT CAAGGAACTG AGAGTGATTG    240
AGAGTGGACC ACACTGCGCC AACACAGAAA TTATTGTAAA GCTTTCTGAT GGAAGAGAGC    300
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GAAACTTCAA GCAAATCTAC TTCAACACTT CATGTATTGT GTGGGTCTGT TGTAGGGTTG    480
CCAGATGCAA TACAAGATTC CTGGTTAAAT TTGAATTTCA GTAAACAATG AATAGTTTTT    540
CATTGTACCA TGAAATATCC AGAACATACT TATATGTAAA GTATTATTTA TTTGAATCTA    600
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TTTGCCATAA AGTCAAATTT AGCTGGAAAT CCTGGATTTT TTTCTGTTAA ATCTGGCAAC    840
CCTAGTCTGC TAGCCAGGAT CCACAAGTCC TTGTTCCACT GTGCCTTGGT TTCTCCTTTA    900
TTTCTAAGTG GAAAAAGTAT TAGCCACCAT CTTACCTCAC AGTGATGTTG TGAGGACATG    960
TGGAAGCACT TTAAGTTTTT TCATCATAAC ATAAATTATT TTCAAGTGTA ACTTATTAAC   1020
CTATTTATTA TTTATGTATT TATTTAAGCA TCAAATATTT GTGCAAGAAT TTGGAAAAAT   1080
AGAAGATGAA TCATTGATTG AATAGTTATA AAGATGTTAT AGTAAATTTA TTTTATTTTA   1140
GATATTAAAT GATGTTTTAT TAGATAAATT TCAATCAGGG TTTTTAGATT AAACAAAGAA   1200
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AGTACATTAT TGTTTATCTG AAAGTTTTAA TTGAACTAAC AATCCTAGTT TGATACTCCC   1320
AGTCTTGTCA TTGCCAGCTG TGTTGGTAGT GCTGTGTTGA ATTACGGAAT AATGAGTTAG   1380
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Seq ID NO: C47 DNA Sequence
Nucleic Acid Accession #: NM_005603.1
Coding sequence: 1..3756

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GAATGTACAT GGCAAGTCAA AGCAAACGAT CGCAAGTACC ACGAACAACC TCACTTTATG    240
AACACAAAAT TCTTGTGTAT TAAGGAGAGT AAAATATGCGA ATAATGCAAT TAAAACATAC   300
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GTGGACGATG TGGCTCGCCA TAAAATGGAT AAGGAAATCA ACAATAGGAC GTGTGAAGTC    540
ATTAAGGATG GCAGGTTCAA AGTTGCTAAG TGGAAAGAAA TTCAAGTTGG AGACGTCATT    600
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     ATCTCCTCCG GGCGCAGCAT CCGCAAGAAG CGCTCGCCGC TTGATGCCAT CGTGGCGGAT    3720
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Seq ID NO: C48 DNA Sequence
Nucleic Acid Accession #: XM_044533
Coding sequence: 238..2751

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     AGTCCGGCCG AGCCACCTGA GCCCGAGCCG CGGGACACCG TCGCTCCTGC TCTCCGAATG    240
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     TCCCCTCCGC TCTGCTCTTC GTGGAACACG ACCGTGGTGC CCGGCCCTTG GGAGCCTTGG    2880
     GGCCAGCTGG CCTGCTGCTC TCCAGTCAAG TAGCGAAGCT CCTACCACCC AGACACCCAA    2940
     ACAGCCGTGG CCCCAGAGGT CCTGGCCAAA TATGGGGGCC TGCCTAGGTT GGTGGAACAG    3000
     TGCTCCTTAT GTAAACTGAG CCCTTTGTTT AAAAAACAAT TCCAAATGTG AAACTAGAAT    3060
     GAGAGGGAAG AGATAGCATG GCATGCAGCA CACACGGCTG CTCCAGTTCA TGGCCTCCCA    3120
     GGGGTGCTGG GGATGCATCC AAAGTGGTTG TCTGAGACAG AGTTGGAAAC CCTCACCAAC    3180
     TGGCCTCTTC ACCTTCCACA TTATCCCGCT GCCACCGGCC GCCCTGTCTC ACTGCAGATT    3240
     CAGGACCAGC TTGGGCTGCG TGCGTTCTGC CTTGCCAGTC AGCCGGAGGAT GTAGTTGTTG    3300
     CTGCCGTCGT CCCACCACCT CAGGGACCAG AGGGCTAGGT TGGCACTGCG GCCCTCACCA    3360
     GGTCCTGGGC TCGGACCCAA CTCCTGGACC TTTCCAGCCT GTATCAGGCT GTGGCCACAC    3420
     GAGAGGCACG CGCGAGCTCA GGAGAGATTT CGTGACAATG TACGCCTTTC CCTCAGAATT    3480
     CAGGGAAGAG ACTGTGCGCCT GCCTTCCTCC GTTGTTGCGT GAGAACCCGT GTGCCCCTTC    3540
     CCACCATATC CACCCTCGCT CCATCTTTGA ACTCAAACAC GAGGAACTAA CTGCACCCTG    3600
     GTCCTCTCCC CAGTCCCCAG TTCACCCTCC ATCCCTACCC TTCCTCCACT CTAAGGGATA    3660
     TCAACACTGC CCAGCACAGG GGCCCTGAAT TTATGTGGTT TTTATACATT TTTTAATAAG    3720
     ATGCACTTTA TGTCATTTTT TAATAAAGTC TGAAGAATTA CTGTTT                   3766
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Seq ID NO: C49 DNA Sequence
Nucleic Acid Accession #: NM_007019.1
Coding sequence: 41..580

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     1         11        21        31        41        51
     |         |         |         |         |         |
     GGCACGAGCG AGTTCCTGTC TCTCTGCCAA CGCCGCCCGG ATGGCTTCCC AAAACCGCGA    60
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        CCCAGCCGCC ACTAGCGTCG CCGCCGCCCG TAAAGGAGCT GAGCCGAGCG GGGGCGCCGC   120
        CCGGGGTCCG GTGGGCAAAA GGCTACAGCA GGAGCTGATG ACCCTCATGA TGTCTGGCGA   180
        TAAAGGGATT TCTGCCTTCC CTGAATCAGA CAACCTTTTC AAATGGGTAG GGACCATCCA   240
        TGGAGCAGCT GGAACAGTAT ATGAAGACCT GAGGTATAAG CTCTCGCTAG AGTTCCCCAG   300
  5     TGGCTACCCT TACAATGCGC CCACAGTGAA GTTCCTCACG CCCTGCTATC ACCCCAACGT   360
        GGACACCCAG GGTAACATAT GCCTGGACAT CCTGAAGGAA AAGTGGTCTG CCCTGTATGA   420
        TGTCAGGACC ATTCTGCTCT CCATCCGAG  CCTTCTAGGA GAACCCAACA TTGATAGTCC   480
        CTTGAACACA CATGCTGCCG AGCTCTGGAA AAACCCCACA GCTTTTAAGA AGTACCTGCA   540
        AGAAACCTAC TCAAAGCAGG TCACCAGCCA GGAGCCCTGA CCCAGGCTGC CCAGCCTGTC   600
  10    CTTGTGTCGT CTTTTTAATT TTTCCTTAGA TGGTCTGTCC TTTTTGTGAT TTCTGTATAG   660
        GACTCTTTAT CTTGAGCTGT GGTATTTTTG TTTTGTTTTT GTCTTTTAAA TTAAGCCTCG   720
        GTTGAGCCCT TGTATATTAA ATAAATGCAT TTTTGTCCTT TTTTAAAAAA AAAAAAAAAA   780
        AAA                                                                783

  15    Seq ID NO: C50 DNA Sequence
        Nucleic Acid Accession #: NM_014584.1
        Coding sequence: 227..1633


  20    1          11         21         31         41         51
        |          |          |          |          |          |
        GCACGAGCCC CGGGCTGCCG GCGCGGGCGC CGCGGCACGT CCACAGGCTG GGTCGCGAGG    60
        TGGCGATCGC TGAGAGGCAG GAGGGCCGAG GCGGGCCTGG GAGGCGGCCC GGAGGTGGGG   120
        CGCCGCTGGG GCCGGCCCGC ACGGGCTTCA TCTGAGGGCG CACGGCCCGC GACCGAGCGT   180
        GCGGACTGGC CTCCCAAGCG TGGGGCGACA AGCTGCCGGA GCTGCAATGG GCCGCGGCTG   240
  25    GGGATTCTTG TTTGGCCTCC TGGGCGCCGT GTGGCTGCTC AGCTCGGGCC ACGGAGAGGA   300
        GCAGCCCCCG GAGACAGCGG CACAGAGGTG CTTCTGCCAG GTTAGTGGTT ACTTGGATGA   360
        TTGTACCTGT GATGTTGAAA CCATTGATAG ATTTAATAAC TACAGGCTTT TCCCAAGACT   420
        ACAAAAACTT CTTGAAAGTG ACTACTTTAG GTATTACAAG GTAAAACTGA AGAGGCCGTG   480
        TCCTTTCTGG AATGACATCA GCCAGTGTGG AAGAAGGGAC TGTGCTGTCA AACCATGTCA   540
  30    ATCTGATGAA GTTCCTGATG GAATTAAATC TGCGAGCTAC AAGTATTCTG AAGAAGCCAA   600
        TAATCTCATT GAAGAATGTG AACAAGCTGA ACGACTTGGA GCAGTGGATG AATCTCTGAG   660
        TGAGGAAACA CAGAAGGCTG TTCTTCAGTG GACCAAGCAT GATGATTCTT CAGATAACTT   720
        CTGTGAAGCT GATGACATTC AGTCCCCTGA AGCTGAATAT GTAGATTTGC TTCTTAATCC   780
        TGAGCGCTAC ACTGGTTACA AGGGACCAGA TGCTTGGAAA ATATGGAATG TCATCTACGA   840
  35    AGAAAACTGT TTTAAGCCAC AGACAATTAA AAGACCTTTA AATCCTTTGG CTTCTGGTCA   900
        AGGGACAAGT GAAGAGAACA CTTTTTACAG TTGGCTAGAA GGTCTCTGTG TAGAAAAAAG   960
        AGCATTCTAC AGACTTATAT CTGGCCTACA TGCAAGCATT AATGTGCATT TGAGTGCAAG  1020
        ATATCTTTTA CAAGAGACCT GGTTAGAAAA GAAATGGGGA CACACATTA CAGAATTTCA   1080
        ACAGCGATTT GATGGAATTT TGACTGAGG  AGAAGGTCCA AGAAGGCTTA AGAACTTGTA  1140
  40    TTTTCTCTAC TTAATAGAAC TAAGGGCTTT ATCCAAAGTG TTACCATTCT TCGAGCGCCC  1200
        AGATTTTCAA CTCTTTACTG GAAATAAAAT TCAGGATGAG GAAAACAAA  TGTTACTTCT  1260
        GGAAATACTT CATGAAATCA AGTCATTTCC TTTGCATTTT GATGAGAATT CATTTTTTGC  1320
        TGGGGATAAA AAAGAAGCAC ACAAACTAAA GGAGGACTTT CGACTGCATT TTAGAAATAT  1380
        TTCAAGAATT ATGGATTGTG TTGGTTGTTT TAAATGTCGT CTGTGGGGAA AGCTTCAGAC  1440
  45    TCAGGGTTTG GGCACTGCTC TGAAGATCTT ATTTTCTGAG AAATTGATAG CAAATATGCC  1500
        AGAAAGTGGA CCTAGTTATG AATTCCATCT AACCAGACAA GAAATAGTAT CATTATTCAA  1560
        CGCATTTGGA AGAATTTCTA CAAGTGTGAA AGAATTAGAA AACTTCAGGA ACTTGTTACA  1620
        GAATATTCAT TAAAGAAAAC AAGCTGATAT GTGCCTGTTT CTGGACAATG GAGGCGAAAG  1680
        AGTGGAATTT CATTCAAAGG CATAATAGCA ATGACAGTCT TAAGCCAAAC ATTTTATATA  1740
  50    AAGTTGCTTT TGTAAAGGAG AATTATATTG TTTTAAGTAA ACACATTTTT AAAAATTGTG  1800
        TTAAGTCTAT GTATAATACT ACTGTGAGTA AAAGTAATAC TTTAATAATG TGGTACAAAT  1860
        TTTAAAGTTT AATATTGAAT AAAAGGAGGA TTATCAAATT CATATATGAT AAAAGTGAAT  1920
        GTTCTAAGTC TCTCAAACTA GCGTTTTATG TAATAATATG TAATATAAAT AAAACTATGG  1980
        TAAATGTGAC AAGCATTTAA TAGGAAAATG CTAAGGAGGC CTCATAAATG ACCCATAATT  2040
  55    ACCAACGTAG AATTTTTCAG TACATTTAGG GTTGCTGGAT TTAGCAAATA AAAATAAAGA  2100
        TTGCCCAGTT AGATTTGAAT TTCAGATAAA CAATTAGTTT TTTAATATTT TACATGGAAT  2160
        ATTTGGAAAA TACTTATACT AAAAAAATTAT TTGTTTGAAA TTCACATTTA ACTGGGAGTC  2220
        TTGTATTTTA TCTGGCAATC CTAAAATACA TTGGTATGAA ACAAATCACT TTTAGAAGTA  2280
        TATTGCTATT TTGATTGGGT TGTTTTTGTG TGTAGAAACG TACAATAACA ACTCAAAGGC  2340
  60    ACAGGAGATT TCTAAACATT GTGAAAAGTT GAATAGAATTA TATATTTATT CTCATAATAC  2400
        TTTCACTAAT ACTAAATAAA ATTTGGGGAA CACTTTTTAT TTTTATATAA TTTCCAATTT  2460
        ACAGAAAAGT TTCAAAAATA GTACAAAGAG CTCTCTTACC CAGATTCACT AATTGTTCAT  2520
        ACGTGCTTTA TCTTTCATGC TTTCTCTGTA CACACACACA CACACACAAA TTTTTCCTCA  2580
        ATCATTTGAA AGTCAGTTAT AGGCATCATG CCCCTTAAAC CCTAAATACT TCAGTGTGTA  2640
  65    ATACTGAATA ATTACTAAAA ATGATTTTCT CAGAAAAAAA AACTCCCACA ATTCTGGAAC  2700
        TATAATACTG TAAGCCTTAG AATAAATAAT ACTTTCAAGT TCCAATCTAA AGTTCTTTTT  2760
        GAGTTTTGTT GCCCGTTTTA TGCTTGATGT GTATAGTAAT AGGGTAGGCT ATTTATTTTA  2820
        TTAAAATTTT TTTTAGAGAC AAGGTTTTGC TGTGTTGCCC AAGCTGGAAC TTGAACGACT  2880
        GGGCTGAAGT GATCTTCCCA CCTCAGCCTC CCAAGTAGCT GGGAATACAG GTGTCTGCCA  2940
  70    CCATACCCAG TTTCATTTTT GTTTTTTATA CCCGAAGTTC ATTTCCTTTG TCTCCCTAAA  3000
        ACTGAACTGT AATTTTGGGA GGTTTTCATT AGTGGAAGCT CTTCATTTAT AAAGCTATTT  3060
        GAAGGGGTTT AGGAATTTAT ATCACATGGT AATTGTAGAG AAAAAGAAGC TATATACCTC  3120
        AAAATCGTGC CCTCTTTACA TATGTCTTAT CAGGTATAAC ATGTTGAAAT GTCACATTAG  3180
        TAGTAAAGTG GGGTTTATTT ATATAGTGGT TAAGAAATGT CAGTTTACAC TGCTGTATAC  3240
  75    TTCTTCTTCT GTGTCCCTAA GGCCTGGTAC AGTGCCAAGC ACATACTTGG TATCCAATAA  3300
        ATATTTGTTG GATGAAAAAA AAAAAAAAAA AAAA                              3334


  80    Seq ID NO: C51 DNA Sequence
        Nucleic Acid Accession #: NM_002888.1
        Coding sequence: 37..723


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1229

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            CCCGCTCCCT GGTCCGGGCC CAGGGGCCCG CGCCCCACCG CCCCGCTGCT CGCGCTGCTG   120
            CTGTTGCTCG CCCCGGTGGC GGCGCCCGCG GGGTCCGGGG GCCCCGACGA CCCTGGGCAG   180
            CCTCAGGATG CTGGGGTCCC GCGCAGGCTC CTGCAGCAGA AGGCGCGCGC GGCGCTTCAC   240
            TTCTTCAACT TCCGGTCCGG CTCGCCCAGC GCGCTGCGAG TGCTGGCCGA GGTGCAGGAG   300
            GGCCGCGCGT GGATTAATCC AAAAGAGGGA TGTAAAGTTC ACGTGGTCTT CAGCACAGAG   360
            CGCTACAACC CAGAGTCTTT ACTTCAGGAA GGTGAGGGAC GTTTGGGGAA ATGTTCTGCT   420
            CGAGTGTTTT TCAAGAATCA GAAACCCAGA CCAACCATCA ATGTAACTTG TACACGGCTC   480
            ATCGAGAAAA AGAAAAGACA ACAAGAGGAT TACCTGCTTT ACAAGCAAAT GAAGCAACTG   540
            AAAAACCCCT TGGAAATAGT CAGCATACCT GATAATCATG GACATATTGA TCCCTCTCTG   600
            AGACTCATCT GGGATTTGGC TTTCCTTGGA AGCTCTTACG TGATGTGGGA AATGACAACA   660
            CAGGTGTCAC ACTACTACTT GGCACAGCTC ACTAGTGTGA GGCAGTGGGT AAGAAAAACC   720
            TGAAAATTAA CTTGTGCCAC AAGAGTTACA ATCAAGTGG TCTCCTTAGA CTGAATTCAT   780
            GTGAACTTCT AATTTCATAT CAAGAGTTGT AATCACATTT ATTTCAATAA ATATGTGAGT   840
            TCCTGC                                                              846
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Seq ID NO: C52 DNA Sequence
Nucleic Acid Accession #: NM_005409.3
Coding sequence: 94..378

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            TTCCTTTCAT GTTCAGCATT TCTACTCCTT CCAAGAAGAG CAGCAAAGCT GAAGTAGCAG    60
            CAACAGCACC AGCAGCAACA GCAAAAAACA AACATGAGTG TGAAGGGCAT GGCTATAGCC   120
            TTGGCTGTGA TATTGTGTGC TACAGTTGTT CAAGGCTTCC CCATGTTCAA AAGAGGACGC   180
            TGTCTTTGCA TAGGCCCTGG GGTAAAAGCA GTGAAAGTGG CAGATATTGA GAAAGCCTCC   240
            ATAATGTACC CAAGTAACAA CTGTGACAAA ATAGAAGTGA TTATTACCCT GAAAGAAAAT   300
            AAAGGACAAC GATGCCTAAA TCCCAAATCG AAGCAAGCAA GGCTTATAAT CAAAAAAGTT   360
            GAAAGAAAGA ATTTTTAAAA ATATCAAAAC ATATGAAGTC CTGGAAAAGG GCATCTGAAA   420
            AACCTAGAAC AAGTTTAACT GTGACTACTG AAATGACAAG AATTCTACAG TAGGAAACTG   480
            AGACTTTTCT ATGGTTTTGT GACTTTCAAC TTTTGTACAG TTATGTGAAG GATGAAAGGT   540
            GGGTGAAAGG ACCAAAAACA GAAATACAGT CTTCCTGAAT GAATGACAAT CAGAATTCCA   600
            CTGCCCAAAG GAGTCCAGCA ATTAAATGGA TTTCTAGGAA AAGCTACCTT AAGAAAGGCT   660
            GGTTACCATC GGAGTTTACA AAGTGCTTTC ACGTTCTTAC TTGTTGTATT ATACATTCAT   720
            GCATTTCTAG GCTAGAGAAC CTTCTAGATT TGATGCTTAC AACTATTCTG TTGTGACTAT   780
            GAGAACATTT CTGTCTCTAG AAGTTATCTG TCTGTATTGA TCTTTATGCT ATATTACTAT   840
            CTGTGGTTAC AGTGGAGACA TTGACATTAT TACTGGAGTC AAGCCCTTAT AAGTCAAAAG   900
            CATCTATGTG TCGTAAAGCA TTCCTCAAAC ATTTTTTCAT GCAAATACAC ACTTCTTTCC   960
            CCAAATATCA TGTAGCACAT CAATATGTAG GGAAACATTC TTATGCATCA TTTGGTTTGT  1020
            TTTATAACCA ATTCATTAAA TGTAATTCAT AAAATGTACT ATGAAAAAAA TTATACGCTA  1080
            TGGGATACTG GCAACAGTGC ACATATTTCA TAACCAAATT AGCAGCACCG GTCTTAATTT  1140
            GATGTTTTTC AACTTTTATT CATTGAGATG TTTTGAAGCA ATTAGGATAT GTGTGTTTAC  1200
            TGTACTTTTT GTTTTGATCC GTTTGTATAA ATGATAGCAA TATCTTGGAC ACATTTGAAA  1260
            TACAAAATGT TTTTGTCTAC CAAAGAAAAA TGTTGAAAAA TAAGCAAATG TATACCTAGC  1320
            AATCACTTTT ACTTTTTGTA ATTCTGTCTC TTAGAAAAAT ACATAATCTA ATCAATTTCT  1380
            TTGTTCATGC CTATATACTG TAAAATTTAG GTATACTCAA GACTAGTTTA AAGAATCAAA  1440
            GTCATTTTTT TCTCTAATAA ACTACCACAA CCTTTCTTTT TTAAAAAAAA AAA          1493
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Seq ID NO: C53 DNA Sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..609

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            |          |          |          |          |          |
            ATGCTGCGGC AGGTGCTTCG CAGAGGGCTC CAGTCGTTCT GCCACAGGCT GGGTTTGTGC    60
            GTGAGCCGGC ACCCGGTCTT TTTCCTCACC GTGCCCGCAG TCCTGACAAT CACCTTCGGC   120
            CTCAGCGCGC TCAACCGCTT CCAGCCCGAG GGCGGACCTGG AGCGCCTGGT CGCTCCCAGC   180
            CACAGCCTGG CCAAGATCGA GCGCAGCCTG GCCAGCAGCC TTTTCCCCCT GGACCAGTCC   240
            AAAAGCCAGC TCTATTCGGA CTTACACACC CCTGGGAGGT ATGGCAGGGT GATCCTCCTC   300
            TCCCCAACCG GGACAAATAT TTGCTCCAG GCTGAGGGGA TCCTGCACAC CCACCGAGCC   360
            GTGCTGGAAA TGAAGGTGAA CCACAAGGGC TATAATTATA CTTTTTCCCA TCTGTGTGTG   420
            TTGAGAAATC AGGATAAGAA ATGCGTGCTG GATGATATTA TTTCAGTGCT AGAGGATCTC   480
            AGGCAGGCTG CCGTCTCCAA TAAGACAACA GCCAGGGTGC AAGTGAGGTA TCCCAACACT   540
            AAATTAAAGG TATGCTCCTT CTGCATGCTT CTGCCAATTA AAGAGGCAGC ACTTCATTTC   600
            TTGCCCTAA                                                           609
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Seq ID NO: C54 DNA Sequence
Nucleic Acid Accession #: NM_002438.1
Coding sequence: 104..4474

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            1          11         21         31         41         51
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            GGGAACTTGG ATTAGGTGGA GAGGCAGTTG GGGGGCCTCG TTGTTTTGCG TCTTAGTTCC    60
            GCCCTCCTGT CCATCAGGAG AAGGAAAGGA TAAACCCTGG GCCATGAGGC TACCCCTGCT   120
            CCTGGTTTTT GCCTCTGTCA TTCCGGGTGC TGTTCTCCTA CTGGACACCA GGCAATTTTT   180
            AATCTATAAT GAAGATCACA AGCGCTGCGT GGATGCAGTG AGTCCCAGTG CCGTCCAAAC   240
            CGCAGCTTGC AACCAGGATG CCGAATCACA GAAATTCCGA TGGGTGTCCG AATCTCAGAT   300
            TATGAGTCGTT GCATTTAAAT TATGCCTGGG AGTGCCATCA AAAACAGACT GGGTTGCTAT   360
            CACTCTCTAT GCCTGTGACT CAAAAAGTGA ATTTCAGAAA TGGGAGTGCA AAAATGACAC   420
            ACTTTTGGGG ATCAAAGGAA AAGATTTATT TTTTAACTAC GGCAACAGAC AAGAAAAGAA   480
            TATTATGCTC TACAAGGGAT CGGGTTTATG GAGCAGGTGG AAGATCTATG GAACCACAGA   540
            CAATCTGTGC TCCAGAGGTT ATGAAGCCAT GTATACGCTA CTAGGCAATG CCAATGGAGC   600
            AACCTGTGCA TTCCCGTTCA AGTTTGAAAA CAAGTGGTAC GCAGATTGCA CGAGTGCTGG   660
            GCGGTCGGAT GGGATGGCTCT GGTGCGGAAC CACTACTGAC TATGACACAG ACAAGCTATT   720
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     TGGATATTGT CCATTGAAAT TTGAGGGCAG TGAAAGCTTA TGGAATAAAG ACCCGCTGAC    780
     CAGCGTTTCC TACCAGATAA ACTCCAAATC CGCTTTAACG TGGCACCAAG CGAGGAAAAG    840
     CTGCCAACAA CAGAACGCTG AGCTCCTGAG CATCACAGAG ATACATGAGC AAACATACCT    900
     GACAGGATTA ACCAGTTCCT TGACCTCAGG ACTCTGGATT GGACTTAACA GTCTGAGCTT    960
     CAACAGCGGT TGGCAGTGGA GTGACCGCAG TCCTTTCCGA TATTTGAACT GGTTACCAGG   1020
     AAGTCCATCA GCTGAACCTG GAAAAAGCTG TGTGTCACTA AATCCTGGAA AAAATGCTAA   1080
     ATGGGAAAAT CTGGAATGTG TTCAGAAACT GGGCTATATT TGCAAAAAGG GCAACACCAC   1140
     TTTAAATTCT TTTGTTATTC CCTCAGAAAG TGATGTGCCT ACTCACTGTC CTAGTCAGTG   1200
     GTGGCCGTAT GCCGGTCACT GTTACAAGAT TCACAGAGAT GAGAAAAAAA TCCAGAGGGA   1260
     TGCTCTGACC ACCTGCAGGA AGGAAGGCGG TGACCTCACA AGTATCCACA CCATCGAGGA   1320
     ATTGGACTTT ATTATCTCCC AGCTAGGATA TGAGCCAAAT GACGAATTGT GGATCGGCTT   1380
     AAATGACATT AAGATTCAAA TGTACTTTGA GTGGAGTGAT GGGACCCCTG TAACGTTTAC   1440
     CAAATGGCTT CGTGGAGAAC CAAGCCATGA AACAACAGA CAGGAGGATT GTGTGGTGAT   1500
     GAAAGGCAAG GATGGGTACT GGGCAGATCG GGGCTGTGAG TGGCCTCTTG GCTACATCTG   1560
     CAAGATGAAA TCACGAAGCC AAGGTCCAGA AATAGTGGAA GTCGAAAAAG GCTGCAGGAA   1620
     AGGCTGGAAA AAACATCACT TTTACTGCTA TATGATTGGA CATACGCTTT CAACATTTGC   1680
     AGAAGCAAAC CAAACCTGTA ATAATGAGAA TGCTTATTTA ACAACTATTG AAGACAGATA   1740
     TGAACAAGCC TTCCTGACTA GTTTCGTTGG CTTAAGGCCT GAAAAATATT TCTGGACAGG   1800
     ACTTTCAGAT ATACAAACCA AAGGGACTTT TCAGTGGACC ATCGAGGAAG AGGTTCGGTT   1860
     CACCCACTGG AATTCAGATA TGCCAGGGCG AAAGCCAGGG TGTGTTGCCA TGAGAACCGG   1920
     GATTGCAGGG GGCTTATGGG ATGTTTTGAA ATGTGATGAA AAGGCAAAT TTGTGTGCAA   1980
     GCACTGGGCA GAAGGAGTAA CCCACCCACC GAAGCCCACG ACGACTCCCG AACCCAAATG   2040
     TCCGGAGGAT TGGGGCGCCA GCAGTAGAAC AAGCTTGTGT TTCAAGCTGT ATGCAAAAGG   2100
     AAAACATGAG AAGAAAACGT GGTTTGAATC TCGAGATTTT TGTCGAGCTC TGGGTGGAGA   2160
     CTTAGCTAGC ATCAATAACA AAGAGGAACA GCAAACAATA TGGCGATTAA TAACAGCTAG   2220
     TGGAAGCTAC CACAAACTGT TTTGGTTGGG ATTGACATAT GGAAGCCCTT CAGAAGGTTT   2280
     TACTTGGAGT GATGGTTCTC CTGTTTCATA TGAAAACTGG GCTTATGGAG AACCTAATAA   2340
     TTATCAAAAT GTTGAATACT GTGGTGAGCT GAAAGGTGAC CCTACTATGT CTTGGAATGA   2400
     TATTAATTGT GAACACCTTA ACAACTGGAT TTGCCAGATA CAAAAGGAC AAACACCAAA   2460
     ACCTGAGCCA ACACCAGCTC CTCAAGACAA TCCACCAGTT ACTGAAGATG GGTGGGTTAT   2520
     TTACAAAGAC TACCAGTATT ATTTCAGCAA AGAGAAGGAA ACCATGGACA ATGCGCGAGC   2580
     GTTTTGCAAG AGGAATTTTG GTGATCTTGT TTCTATTCAA AGTGAAAGTG AAAAGAAGTT   2640
     TCTATGGAAA TATGTAAACA GAAATGATGC ACAGTCTGCA TATTTTATTG GTTTATTGAT   2700
     CAGCTTGGAT AAAAAGTTTG CTTGGATGGA TGGAAGCAAA GTGGATTACG TGTCTTGGGC   2760
     CACAGGTGAA CCCAATTTTG CAAATGAAGA TGAAAACTGT GTGACCATGT ATTCAAATTC   2820
     AGGGTTTTGG AATGACATTA ACTGTGGCTA TCCAAACGCC TTCATTTGCC AGCGACATAA   2880
     CAGTAGTATC AATGCTACCA CAGTTATGCC TACCATGCCC TCGGTCCCAT CAGGGTGCAA   2940
     GGAAGGTTGG AATTTCTACA GCAACAAGTG TTTCAAAATC TTTGGATTTA TGGAAGAAGA   3000
     AAGAAAAAAT TGGCAAGAGG CACGAAAAGC TTGTATAGGC TTTGGAGGGA ATCTGGTCTC   3060
     CATACAAAAT GAAAAAGAGC AAGCATTTCT TACCTATCAC ATGAAGGACT CCACTTTCAG   3120
     TGCCTGGACT GGGCTGAATG ATGTCAATTC AGAACACACG TTCCTTTGGA CGGATGGACG   3180
     AGGAGTCCAT TACACAAACT GGGGGGAAAGG TTACCCTGGT GGAGAAGAA GCAGTCTTTC   3240
     TTATGAAGAT GCTGACTGTG TTGTTATTAT TGGAGGTGCA TCAAATGAAG CAGGAAAATG   3300
     GATGGATGAT ACCTGCGACA GTAAACGAGG CTACATATGC CAGACACGAT CCGACCCTTC   3360
     CTTGACTAAT CCTCCAGCAA CGATTCAAAC AGATGGCTTT GTTAAATATG GCAAAAGCAG   3420
     CTATTCACTC ATGAGACAAA AATTTCAATG GCATGAAGCG GAGACATACT GCAAGCTTCA   3480
     CAATTCCCTT ATAGCCAGCA TTCTGGATCC CTACAGTAAT GCATTTGCGT GGCTGCAGAT   3540
     GGAAACATCT AATGAACGTG TGTGGATCGC CCTGAACAGT AACCTGACTG ATAATCAATA   3600
     CACTTGGACT GATAAGTGGA GGGTGAGGTA CACTAACTGG GCTGCTGATG AGCCCAAATT   3660
     GAAATCAGCA TGTGTTTATC TGGATCTTGA TGGCTACTGG AAGACAGCAC ATTGCAATGA   3720
     AAGTTTTTAC TTTCTCTGTA AAAGATCAGA TGAAATCCCT GCTACTGAAC CCCCACAACT   3780
     GCCTGGCAGA TGCCCGGAGT CAGATCACAC AGCATGGATT CCTTTCCATG GTCACTGTTA   3840
     CTATATTGAG TCCTCATATA CAAGGAAACTG GGGCCAAGCT CTCTGGAAT GTCTTCGAAT   3900
     GGGTTCCTCT CTGGTTTCCA TTGAAAGTGC TGCAGAATCC AGTTTTCTGT CATATCGGGT   3960
     TGAGCCACTT AAAAGTAAAA CCAATTTTTG GATAGGATTG TTCAGAAATG TTGAAGGGAC   4020
     GTGGCTGTGG ATAAATAACA GTCCGGTCTC CTTTGTCAAC TGGAACACAG GAGATCCCTC   4080
     TGGTGAACGG AATGATTGTG TAGCTTTACA TGCGTCTTCT GGGTTTTGGA GTAATATTCA   4140
     CTGTTCTTCC TACAAAGGAT ATATTTGTAA AAGACCAAAA ATTATTGATG CTAAACCTAC   4200
     TCATGAATTA CTTACAACAA AAGCTGACAC AAGGAAGATG GACCCTTCTA AACCGTCTTC   4260
     CAACGTGGCC GGAGTAGTCA TCATTGTGAT CCTCCTGATT TTAACGGGTG CTGGCCTTGC   4320
     CGCCTATTTC TTTTATAAGA AAGACGTGT GCACCTACCT CAAGAGGGCG CCTTTGAAAA   4380
     CACTCTGTAT TTTAACAGTC AGTCAAGCCC AGGAACTAGT GATATGAAAG ATCTCGTGGG   4440
     CAATATTGAA CAGAATGAAC ACTCGGTCAT CTAGTACCTC AATGCGATTC TGAGATATTT   4500
     GAATTTCATA AAATTGTAAC TGAAATTTAA AATTTTTAGT TCAATGTGAT TGTTTTCTTT   4560
     AAAATGAGTA CTGAATTGTA CTGGTCTGTC CTTTTTTCCT TTGCCTAATT GAAGAAATAA   4620
     TTGCTTGTTT TCTAGCCTGG CAAGATATTT TCATAAAAGA GGGATAACAA TGCTGATTAC   4680
     TACCTTTTAA AATATTTTAG ATAAATGCAC AGCACCACAG CACCACATCT AAGCATTAGT   4740
     GATGGGTAGC TGATGTCAGC TTCATGTGGA TTTTAAGCAC TCTAGAAACA ATGAAGCTTC   4800
     TTGGCATATT TTAAGGAGCT CCCAAAATGT GTTACCTATT AAATTGTAAC TCAGCAAGTA   4860
     GAAGACCATT TGAAAAGTCA GGTACAAATT TCCTCAAGTG GCATAAAAAT GTAGTCAGTT   4920
     TTCTCTTTTA CCAGTTTTTA TTTCCACTCC AATTATTTAG AACTTTATTT GTACATGTGC   4980
     AGAAGAATAA GGCAGCTGAG AATCTTGTTT CCCCCAAGAG AGTTTTACAG GCTGAGTGTT   5040
     GCAAATGTGT TCTTTGTCCT GTTATATGTA TATCAGGAAT ACAAGGATGT GAAATAAAAC   5100
     TGTAAATTTG CATAACTGGA TGTACTTAGA TAATGTGAAA TAAACATTAA AGACAAGGTC   5160
     TATTTTTAAT AAAAAAAAAA AAAA                                          5185
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Seq ID NO: C55 DNA Sequence
Nucleic Acid Accession #: NM_024574.2
Coding sequence: 424..2130

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1          11         21         31         41         51
|          |          |          |          |          |
AGTGCGACTA GCGGCGGCCG GCGAAGCCCG CGCCAGCCCC GCGGGTCGCT GCGGCATCCT    60
CCCGCCGCCC AGCCCCCGCA CGCTCCCTGC AGTTTAAAAG GACCTCCCGC CGCTTCTCGG   120
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      CGCTGCCCCG GGATTCCCCA GCCCCGCGCG GCTCCCTACT CCACTTCGCA GCAACTTCGG      180
      CGACCGCGCG CCGCCCGCCC TCGCCCGCCT TTGAAGTTTG CTGTGCCGAC CGCAAAGTTG      240
      GGACACTTCA GCGGATTGAA TTTTTCTCTT TTATCTGCCT CCGTCCCCGC CCTCCAGGCT      300
      TCTCGTTCCT GGATATTGGT GCTTAGCATC TTGGCAGGGT CCGGGGACGT GGACTATTTC      360
      GCACACCACA CCACGGGGAG GGATTTTTTT CTATTTTCCC TACGAAAAAC AGATCTTTTT      420
      AAGGATGGTG CTGCTCCACT GGTGCCTGCT GTGGCTCCTG TTTCCACTCA GCTCAAGGAC      480
      CCAGAAGTTA CCCACCCGGG ATGAGGAACT TTTTCAGATG CAGATCCGGG ACAAGGCATT      540
      TTTTCATGAT TCGTCAGTAA TTCCAGATGG AGCTGAAATT AGCAGTTATC TCTTTAGAGA      600
      TACACCTAAA AGGTATTTCT TTGTGGTTGA AGAAGACAAT ACTCCATTAT CAGTCACAGT      660
      GACGCCCTGT GATGCGCCTT TGGAGTGGAA GCTGAGCCTC CAGGAGCTGC CAGAGGACAG      720
      GAGCGGGGAA GGCTCAGGTG ATCTGGAACC TCTTGAGCAG CAGAAGCAGC AGATCATTAA      780
      TGAGGAAGGC ACTGAGTTAT TCTTCCTACAA AGGCAATGAT GTTGAGTATT TTATATCGTC      840
      TAGTTCCCCA TCCGGTTTAT ATCAGTTGGA TCTTCTTTCA ACAGAGAAAG ACACACATTT      900
      CAAAGTATAT GCCACCACAA CTCCAGAATC TGATCAGCCA TACCCTGAGT TACCCATGATGA      960
      CCCAAGAGTA GATGTGACCT CACTGGGGCG CACCACGGTC ACTTTGGCCT GGAAACCAAG     1020
      CCCCACTGCC TCTTTGCTGA AACAACCCAT TCAGTACTGT GTGGTCATCA ACAAAGAGCA     1080
      CAATTTCAAA AGTCTCTGTG CAGTGGAAGC AAAACTGAGT GCAGATGATG CTTTTATGAT     1140
      GGCACCGAAA CCTGGTCTGG ACTTCAGCCC CTTTGACTTT GCCCACTTTG GATTTCCTTC     1200
      TGATAATTCA GGTAAAGAAC GCAGTTTCCA GGCAAAGCCT TCTCAAAAC TGGGGCGTCA     1260
      TGTCTACTCC AGGCCCAAGG TTGATATTCA GAAAATCTGC ATAGGAAACA AGAACATCTT     1320
      CACCGTCTCT GATCTGAAAC CCGACACGCA GTACTACTTT GACGTATTTG TGGTCAACAT     1380
      CAACAGCAAC ATGAGCACCG CTTATGTAGG TACCTTTGCC AGGACCAAGG AAGAAGCCAA     1440
      ACAGAAGACA GTCGAGCTCA AAGATGGGAA GATAACAGAT GTATTTGTTA AAAGGAAGGG     1500
      AGCAAAGTTT CTACGGTTTG CTCCAGTCTC TTCTCACCAA AAAGTCACCT TCTTTATTCA     1560
      CTCTTGTCTG GATGCTGTCC AAATCCAAGT GAGAAGAGAT GGGAAACTTC TTCTGTCTCA     1620
      GAATGTGGAA GGCATTCAGC AGTTTCAGCT TAGAGGAAAA CCTAAAGCTA AATACCTCGT     1680
      TCGACTGAAA GGAAACAAGA AAGGAGCATC TATGTTGAAA ATTCTAGCTA CCACAAGGCC     1740
      TACTAAGCAG TCATTTCCCT CTCTTCCTGA AGACACAAGA ATCAAAGCCT TTGACAAGCT     1800
      CCGTACCTGT TCCTCGGCCA CCGTGGCTTG GCTAGGCACT CAGGAAAGGA ACAAGTTTTG     1860
      CATCTACAAA AAAGAAGTGG ATGATAACTA CAATGAAGAC CAGAAGAAAA GAGAGCAAAA     1920
      CCAATGTCTA GGACCAGATA TAAGGAAGAA GTCAGAAAAG GTCCTCTGTA AATATTTCCA     1980
      CAGTCAAAAC CTGCAGAAAG CAGTGACCAC AGAAACAATT AAAGGTCTTC AGCCTGGCAA     2040
      ATCTTACCTG CTGGATGTTT ATGTCATAGG ACATGGGGGG CACTCTGTAA AGTATCAGAG     2100
      TAAGGTTGTG AAAACTAGAA AGTTCTGTTA GTTACCTTCT TATAGAGATA TATTATGTAG     2160
      AACTCCAGGA GGGACCATTAA ATCACTTTAA GTATAAACTG ACTACTCCCA CAGTTGAGAG     2220
      AAGTTGTGAC CTGTACTTGT ACTATGGAAG GAAGGATATC AACGTGTGTA TATTGATGTT     2280
      TATATAAGTA ACTCTTGAAG GAGACTTGTT CTAGCGTGCC CCATGGTACC TAGTGTGTGT     2340
      CTGATGCCGG TTGGTGTCAA AGATAGAGGG CTTCTTGAAG GAACTTGCCA TTCCTTGCTT     2400
      TGACCACTGC ATGAACTGCT TCTAAATTAT TTTATTACCT AAAAAATTAA AATATGCCAT     2460
      TCATTGCACA CACCCACAAA TGCAAATCAT TCCTCTCTAT AGATGCTAGG ATATATATAA     2520
      ATTATTTTAT AAATTCTTGT TTTAAATGTC AGTGTTTCTA TGATTGTAAA CTATTAAATT     2580
      CTTTTCCTAT TAAAGTACAG ATCTAATCTA AGTATTATTA AGTTGATAGC CCTCTAGTCA     2640
      GTTATATTGC TATTGTAAAT TCTTGTTTGT TGAGTAAAAT GTTTAAAATAC TATATGTATC     2700
      TCATGTACAA AGTTGACATA CATTATATTC ATGTACATAA AATTAAAGAG ATTAGATTAT     2760
      ATACTGTTAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAA                   2808
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Seq ID NO: C56 DNA Sequence
Nucleic Acid Accession #: BC034229.1
Coding sequence: 373..1422
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       1         11         21         31         41         51
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      ATCCGGCGGT GGTGACGCGA GAGGCTGGGG TCTCCAGGAC CAACTCCTCT TCATCTTCGT      60
      CTTCCTCAGC CTGCTCAATG TGAAGCCCCT GATCATGATT CACTTCCACT TAATAAATAA     120
      AGTGTTTACA AATCAGAATA ACTTTTAGAC AATATTAAGG TGGTAATCAT GAACAGAAAA     180
      GATTTTGTAG TTCTTCCATG GGGAAAACCT GGAAATTCTG TAAAGCTAAA ATATAGCAAT     240
      GTAATAATTA AAACAAAAGT CTAAGATTTG AAGAGATAAT TTGCTTCAGG ATTTTGATGG     300
      AAGGCAAATG CTAACTTTAA AAACCAGATT TCGGAGAAGT ACAAAAGAAA TAGAAATGCT     360
      CAAGAACTGC GAATGGAGAA AGTACAGTTA GAGTTTGAGA ACCAAGAGAT GGAGAAGAAA     420
      CTGCAAGAAT TCCGATCCAC AAGAAACAAA GAAAAGGAAG ATAGAGAGTC AAGCGAGTAT     480
      TACTGGAAAT CTGGAAAAGT GGGCAAATTG GTCAATCAAT CATATATGAT GTCACAAAAT     540
      AAAGGAAATG TTGTTAAGTT TTCTGCTGGA AAAGTGAAAT TAAAATTGCT GAAGGAACAG     600
      ATTCAAGACA CAGTGAAACC AACAGTTAAT TATAAAATGG CAAATTCTTC AGAATGTGAA     660
      AAACCCAAGA TAAATGGGAA AGTTTGTGGA CAGTGTGAGA ACAAAGCTGC TCTACTGGTA     720
      TGCCTTGAAT GTGGAGAAGA TTATTGTTCA GGATGCTTTG CTAATGTTCA CCAGAAAGGG     780
      GCACTAAAGC TCCACAGAAC AACTCTTTTG CAGGCAAGAT CTCAAATATT ATTCAATGTA     840
      TTGGATGTTG CCCATCAGTT TATAAAGGAT GTTAATCCAG ATGAACCCAA AGAGGAGAAT     900
      AATTCTACAA AGGAAACCAG TAAAATTCAA CATAAACCCA AATCTGTACT TCTCCAGAGG     960
      AGCAGCTCTG AGGTAGAAAT TACAACGATG AAAAGAGCAC AACGTACAAA ACCAAGAAAG    1020
      AGTCTGTTGT GTGAAGGGTC ATTCGATGAA GAAGCTTCTG CACAGTCCTT TCAGGAAGTG    1080
      TTAAGTCAAT GGAGAACCGG AAATCATGAT GACAACAAGA AACAGAATTT ACATGCAGCA    1140
      GTAAAAGACT CATTGGAAGA ATGCAAGTA CAGACTAATC TGAAAAATTTG GAGAGAACCA    1200
      CTTAATATTG AACTTAAAGA AGACATTCTA TCCTATATGG AAAAATTATG GCTTAAAAAA    1260
      CACAGGAGAA CTCCACAAGA GCAACTTTTT AAATGCTACC AGATACGTTC CCACATCCAC    1320
      ATGAAACCAC TGGTGATGCA CAGTGTTCTC AAAATGAAAA CGATGAAGAT AGTGATGGTG    1380
      AGGAGACCAA AGTACAACAC ACAGCTCTTT TATTGCCAGT AGAAACATTA AACATAGAGA    1440
      GACCTGAACC ATCTCTGAAG ATAGTCGAAC TGGATGATAC TTATGAAGAG GAATTTGAAG    1500
      AAGCAGAAAA TATTGTGCCT TACAAAGTTA AATTAGCTGA TGCAGACAGT CAACGAAGTT    1560
      GTGCTTTTCA TGATTGTCAG AAGAATAGCT TTCCATATGA AAATGGCATC CATCAACATC    1620
      ATGTTTTCGA TAAGGGAAAG AGAGACTTCT TAAATCTTTG TCTGAGAAAC AGCTCTACTT    1680
      ATTATAAAGA TAATTCAAAA GGAGAAACTT CAAACACAGA TTTTGACAAC ATCGTGGATC    1740
      CTGATGTGTA TTCTTCTGAC ATTGAAAAAA TTGAGGAAAG CACCTCCTTT GAAAGAAATT    1800
      TAAAGGAGAA AAATATAGGT TTAGAAAGTA ATCAAAAGTC TGATGATTCC TGTGTATCAC    1860
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TTGAAAGCAA GGACACTTTG CTAGGTAGAG ATTTAGAAAA AGCTCCCATT GAGGAGAAAT   1920
TATCTCAAGA CATCAAAGAA TCCTTGGAAT TGAGCAATCT GTATAAGAGG CCAAGCTTTG   1980
AAGAATCAAA AACTACAAAG TCATCACTGT TGTTACAAGA AATAGCCTGC AGAAGTAAGC   2040
CTATAACAAA ACAATATCAA GGACTTGAGA GATTCTTTAT TTTTGATACA AATGAAAGAC   2100
TCAAGTTACT TCCTTCTCAT CGTTTAGAAT GCAACAATTC CAGTACTAGG ATTACACTTG   2160
CAGGTCAGAA ATCACAGAGA CCTTCAACAG CAAATTTTCC ACTTTCCAAC TCTGTTAAAG   2220
AAAGCTCCAG TTGCCTTTCA TCCTCTCATC CTCGATCAAG AAGTGCAGCT GCTCAATCAT   2280
CATCTAGAGC TGCTTCTGAA ATTTCAGAAA TTGAATATAT TGATATTACT GACCAGAATG   2340
AGCTTTCCTT AGATGACACT ACTGATCAAC ATACTTTAGA CAATTTGGAA AAAGAATTAC   2400
AAGTGCTGAG ATCTCTTGCA GATACTTCAG AAAAGCTTTA CAGCTTAACC TCAGAAGAGT   2460
TCCCAGATTT CAGCAGCCAA TCACTGAATA TAAGTCAGAT TTCCACAGAT TTCCTTAAGA   2520
CCTCACATGT GAGGGGTCCC TGTGGAGTTG AGGAATTGAG CTGTTCTGGA AGAGATACCA   2580
AAATTCAGTC TTTGCTGTCA CTTTCTGAGA GCAGTACAGA TGAGGAGGAG GAAGATTTTC   2640
TCAACAAGCA ACATGTCATC ACACTACCGT GGTCAAAGAG TACTTAAAGA TTATTTGTTC   2700
ATTACTGTTT CCATTTTGTA CCCAGAGTAA AGCAAACAAC TGAGAAAAGT AACCAAGTGA   2760
TTACCTATCC AAGTGCTGGA GATTTTGATT ACTAATGTCT TTGATGTTTC AAGGCTACAA   2820
ACTAATAAAA GTAAAATTAT AAGTTCAAAA AAATTTTTAA AAAAAAAAAT AAAAAA      2876
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Seq ID NO: C57 DNA Sequence
Nucleic Acid Accession #: NM_024687.1
Coding sequence: 138..1706

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1          11         21         31         41         51
|          |          |          |          |          |
AAAAACATGA TGACAACAAG AAACAGAATT TACATGCAGC AGTAAAAGAC TCATTGGAAG   60
AATGCGAAGT ACAGACTAAT CTGAAAATTT GGAGAGAACC ACTTAATATT GAACTTAAAG   120
AAGACATTCT ATCCTATATG GAAAAATTAT GGCTTAAAAA ACACAGGAGA ACTCCACAAG   180
AGCAACTTTT TAAAATGCTA TCAGATACGT TCCCACATCC ACATGAAACC ACTGGTGATG   240
CACAGTGTTC TCAAAATGAA AACGATGAAG ATAGTGATGG TGAGGAGACC AAAGTACAAC   300
ACACAGCTCT TTTATTGCCA GTAGAAACAT TAAACATAGA GAGACCTGAA CCATCTCTGA   360
AGATAGTCGA ACTGGATGAT ACTTATGAAG AGGAATTTGA AGAAGCAGAA AATATTGTGC   420
CTTACAAAGT TAAATTAGCT GATGCAGACA GTCAACGAAG TTGTGCTTTT CATGATTGTC   480
AGAAGAATAG CTTTCCCATAT GAAAATGGCA TCCATCAACA TCATGTTTTC GATAAGGGAA   540
AGAGAGACTT CTTAAATCTT TGTCTGAGAA ACAGCTCTAC TTATTATAAA GATAATTCAA   600
AAGGAGAAAC TTCAAACACA GATTTTGACA ACATCGTGGA TCCTGATGTG TATTCTTCTG   660
ACATTGAAAA AATTGAGGAA AGCACCTCCT TTGAAAGAAA TTTAAAGGAG AAAAAATAG   720
GTTTAGAAAG TAATCAAAAG TCTGATGATT CCTGTGTATC ACTTGAAAGC AAGGACACTT   780
TGCTAGGTAG AGATTTAGAA AAAGCTCCCA TTGAGGAGAA ATTATCTCAA GACATCAAAG   840
AATCCTTGGA ATTGAGCAAT CTGTATAAGA GGCCAAGCTT TGAAGAATCA AAAACTACAA   900
AGTCATCACT GTTGTTACAA GAAATAGCCT GCAGAAGTAA GCCTATAACA AAACAATATC   960
AAGGACTTGA GAGATTCTTT ATTTTTGATA CAAATGAAAG ACTCAACTTA CTTCCTTCTC   1020
ATCGTTTAGA ATGCAACAAT TCCAGTACTA GGATTACACT TGCAGAAGAC AGAGAATGGA   1080
TTCCAGACCA TAGCTTAAGT GAATATGCTA ATAATGCAAT TGTCTTGGGT GTTCTGCAGG   1140
GTGCTCGAG TCCATCATCA AGTAGAAAAC AGCAAAAGAT GGGTCAGAAA TCACAGAGAC   1200
CTTCAACAGC AAATTTTCCA CTTTCCAACT CTGTTAAAGA AAGCTCCAGT TGCCTTTCAT   1260
CCTCTCATCC TCGATCAAGA AGTGCAGCTG CTCAATCATC ATCTAGAGCT GCTTCTGAAA   1320
TTTCAGAAAT TGAATATATT GATATTACTG ACCAGAATGA GCTTTCCTTA GATGACACTA   1380
CTGATCAACA TACTTTAGAC AATTTGGAAA AAGAATTACA AGTGCTGAGA TCTCTTGCAG   1440
ATACTTCAGA AAAGCTTTAC AGCTTAACCT CAGAAGAGTT CCCAGATTTC AGCAGCCAAT   1500
CACTGAATAT AAGTCAGATT TCCACAGATT TCCTTAAGAC CTCACATGTG AGGGGTCCCT   1560
GTGGAGTTGA GGAATTGAGC TGTTCTGGAA GAGATACCAA AATTCAGTCT TTGCTGTCAC   1620
TTTCTGAGAG CAGTACAGAT GAGGAGGAGG AAGATTTTCT CAACAAGCAA CATGTCATCA   1680
CACTACCGTG GTCAAAGAGT ACTTAAAGAT TATTTGTTCA TTACTGTTTC CATTTTGTAC   1740
CCAGAGTAAA GCAAACAACT GAGAAAAGTA ACCAAGTGAT TACCTATCCA AGTGCTGGAG   1800
ATTTTGATTA CTAATGTCTT TGATGTTTCA AGGCTACAAA CTAATAAAAG TAAAATTATA   1860
AGTTCAAAAA AAAAAAAA AAAA                                            1884
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Seq ID NO: C58 DNA Sequence
Nucleic Acid Accession #: NM_005408.1
Coding sequence: 76..372

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1          11         21         31         41         51
|          |          |          |          |          |
AAAAGGCGG CGGAACAGCC AGAGGAGCAG AGAGGCAAAG AAACATTGTG AAATCTCCAA   60
CTCTTAACCT TCAACATGAA AGTCTCTGCA GTGCTTCTGT GCCTGCTGCT CATGACAGCA   120
GCTTTCAACC CCCAGGGACT TGCTCAGCCA GATGCACTCA ACGTCCCATC TACTTGCTGC   180
TTCACATTTA GCAGTAAGAA GATCTCCTTG CAGAGGCTGA AGAGCTATGT GATCACCACC   240
AGCAGGTGTC CCCAGAAGGC TGTCATCTTC AGAACCAAAC TGGGCAAGGA GATCTGTGCT   300
GACCCAAAGG AGAAGTGGGT CCAGAATTAT ATGAAACACC TGGGCCGGAA AGCTCACACC   360
CTGAAGACTT GAACTCTGCT ACCCCTACTG AAATCAAGCT GGAGTACGTG AAATGACTTT   420
TCCATTCTCC TCTGGCCTCC TCTTCTATGC TTTGAAATAC TTCTACCATA ATTTTCAAAT   480
AGGATGCATT CGGTTTTGTG ATTCAAAATG TACTATGTGT TAAGTAATAT TGGCTATTAT   540
TTGACTTGTT GCTGGTTTGG AGTTTATTTG AGTATTGCTG ATCTTTTCTA AAGCAAGGCC   600
TTGAGCAAGT AGGTTGCTGT CTCTAAGCCC CCTTCCCTTC CACTATGAGC TGCTGGCAGT   660
GGGTTTGTAT TCGGTTCCCA GGGGTTGAGA GCATGCCTGT GGGAGTCATG GACATGAAGG   720
GATGCTGCAA TGTAGGAAGG AGAGCTCTTT GTGAATGTGA GGTGTTGCTA AATATGTTAT   780
TGTGGAAAGA TGAATGCAAT AGTAGGACTG CTGACATTTT GCAGAAAATA CATTTTATTT   840
AAAATCTCCA AAAAAAAAAA                                               860
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Seq ID NO: C59 DNA Sequence
Nucleic Acid Accession #: AK097746.1
Coding sequence: 185..2224

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       1          11         21         31         41         51
       |          |          |          |          |          |
5      CTTTCATGAC AGTAACAAAT CCAAGATTTT GGAAAAGCGC CTACGATATT TAAATGACCA    60
       CTTCACATAC AACTTATATT GTAATATATG CCGATCACTA TTTGAGAAGG ACAAGCTGTT   120
       ATTTTCCTTT TTATTATGTG CCAATCTTCT TCTGGCAAGG AAAGAGATTG AATACCAGGA   180
       ACTGATGTTT CTTTTAACTG GAGGAGTAAG TCTTAAAAGT GCTGAGAAAA ATCCTGATCC   240
       AACTTGGCTA CAGGACAAAA GCTGGGAGGA AATCTGTCGG GCAAGTGAAT TTCCTGCCTT   300
       CAGAGGACTC AGGCAACATT TTTGTGAACA TATATATGAA TGGCGAGAAA TCTATGACAG   360
10     TAAAGAGCCA CATAATGCTA AATTTCCAGC ACCAATGGAT AAGAACCTAA ATGAACTACA   420
       GAAAATAATA ATTCTTCGGT GTTTAAGACC TGATAAGATA ACCCCAGCTA TAACAAACTA   480
       TGTAACTGAC AAACTAGGGA AAAAGTTTGT AGAGCCTCCA CCATTTGATT TGACAAAGAG   540
       TTACTTGGAT TCAAATTGCA CCATTCCCTT AATTTTTGTT CTATCTCCAG GAGCAGATCC   600
       TATGGCCAGC CTGCTGAAAT TTGCAAATGA TAAATCTATG TCTGGAAATA AGTTTCAAGC   660
15     TATTTCACTG GGACAGGGAC AAGGACCGAT TGCAGCAAAA ATGATTAAAG CAGCAATTGA   720
       AGAAGGAACT TGGGTGTGCC TACAGAATTG CCATCTTGCA GTGTCCTGGA TGCCCATGTT   780
       GGAAAAAATA TGTGAAGATT TTACCTCTGA AACCTGTAAC TCATCCTTTA GGCTTTGGCT   840
       GACAAGCTAT CCATCTTCAA AATTCCCAGT AACAATTCTA CAGAATGGAG TAAAAATGAC   900
       TAATGAACCT CCCACGGGTC TTCGGCTGAA TCTCCTTCAA TCATATCTCA CTGATCCAGT   960
20     TTCTGATCCT GAGTTTTTCA AGGGATGCCG TGGAAAGGAA CTGTTATTTA TCAATGAATA  1020
       TGATACAATT CCATTTGAAG CTATATCTTA CCTGACTGGG GAGTGTAATT ATGGAGGAAG  1080
       AGTGACAGAC GATTGGGACA GACGTCTTCT ATTAACCATG CTGGCTGACT TTTATAATCT  1140
       GTACATAGTT GAAAACCCTC ATTATAAGTT TTCTCCCAGT GGAAACTATT TTGCACCTCC  1200
       TAAAGGCACT TATGAGGACT ACATTGAATT CATTAAGAAA CTTCCATTTA CTCAACACCC  1260
25     TGAGATATTT GGATTACATG AAAACGTTGA CATCTCCAAG GATCTTCAAC AAACAAAAAC  1320
       CCTCTTTGAG TCCTTGCTCC TCACCCAGGG AGGCTCCAAA CAGACAGGAG CCTCAGGAAG  1380
       TACTGATCAG ATTCTGTTAG AAATTACCAA AGATATCCTC AACAAGCTCC CTAGTGATTT  1440
       CGACATTGAA ATGGCACTAC GGAAGTATCC TGTGAGATAT GAAGAAAGCA TGAATACTGT  1500
       GTTAGTACAA GAAATGGAAA GATTTAACAA TTTAATTATA ACTATACGTA ACACTCTACG  1560
30     GGACCTTGAA AAAGCTATTA AGGGTGTGGT TGTGATGGAT TCTGCATTGG AGGCACTCTC  1620
       CAGTAGCTTA CTTGTTGGAA AGGTTCCAGA AATATGGGCC AAACGTTCAT ACCCAAGCCT  1680
       TAAGCCCCTG GGAAGTTACA TCACAGATTT CCTAGCCCGG TTGAACTTTT TACAGGACTG  1740
       GTATAATTCA GGAAAACCTT GTGTGTTTTG GCTGTCAGGT TTCTTTTTCA CTCAGGCCTT  1800
       TTTAACTGGA GCTATGCAGA ATTATGCCAG AAAATATACC ACCCCTATTG ATTTGCTAGG  1860
35     ATATGAATTT GAGGTTATCC CATCTGATAC ATCTGACACA TCACCAGAAG ATGGTGTTTA  1920
       TATCCACGGA CTGTATCTCG ATGGCGCACG CTGGGACCGA GAAAGTGGAT TGCTTGCTGA  1980
       ACAATATCCC AAACTTCTGT TTGACCTGAT GCCCATCATA TGGATAAAAC CAACTCAAAA  2040
       ATCTCGGATT ATAAAGTCGG ATGCCTATGT CTGTCCCCTC TACAAGACAA GTGAACGTAA  2100
       AGGAACTCTT TCCACTACGG GACATTCTAC TAACTTTGTC ATTGCAATGT TGTTAAAAAC  2160
40     AGACCAACCT ACTCGGCACT GGATCAAGCG CGGGGTTGCT TTGCTTTGTC AGTTGGATGA  2220
       CTAAATTGGA CAAATTTATA AAACATCCAA AAGTTT                            2256
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Seq ID NO: C60 DNA Sequence
Nucleic Acid Accession #: J02761.1
Coding sequence: 14..1159

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       1          11         21         31         41         51
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50     GAATTCCGGT GCCATGGCTG AGTCACACCT GCTGCAGTGG CTGCTGCTGC TGCTGCCCAC    60
       GCTCTGTGGC CCAGGCACTG CTGCCTGGAC CACCTCATCC TTGGCCTGTG CCCAGGGCCC   120
       TGAGTTCTGG TGCCAAAGCC TGGAGCAAGC ATTGCAGTGC AGAGCCCTAG GGCATTGCCT   180
       ACAGGAAGTC TGGGGACATG TGGGAGCCGA TGACCTATGC CAAGAGTGTG AGGACATCGT   240
       CCACATCCTT AACAAGATGG CCAAGGAGGC CATTTTCCAG GACACGATGA GGAAGTTCCT   300
55     GGAGCAGGAG TGCAACGTCC TCCCCTTGAA GCTGCTCATG CCCCAGTGCA ACCAAGTGCT   360
       TGACGACTAC TTCCCCCTGG TCATCGACTA CTTCCAGAAC CAGACTGACT CAAACGGCAT   420
       CTGTATGCAC CTGGGCCTGT GCAAATCCCG GCAGCCAGAG CCAGAGCAGG AGCCAGGGAT   480
       GTCAGACCCC CTGCCCAAAC CTCTGCGGGA CCCTCTGCCA GACCCTCTGC TGGACAAGCT   540
       CGTCCTCCCT GTGCTGCCCG GGGCCCTCCA GGCGAGGCCT GGGCCTCACA CACAGGATCT   600
60     CTCCGAGCAG CAATTCCCCA TTCCTCTCCC CTATTGCTGG CTCTGCAGGG CTCTGATCAA   660
       GCGGATCCAA GCCATGATTC CCAAGGGTGC GCTAGCTGTG GCAGTGGCCC AGGTGTGCCG   720
       CGTGGTACCT CTGGTGGCGG GCGGCATCTG CCAGTGCCTG GCTGAGCGCT ACTCCGTCAT   780
       CCTGCTCGAC ACGCTGCTGG GCCGCATGCT GCCCCAGCTG GTCTGCCGCC TCGTCCTCCG   840
       GTGCTCCATG GATGACAGCG CTGGCCCAAG GTCGCCGACA GGAGAATGGC TGCCGCGAGA   900
65     CTCTGAGTGC CACCTCTGCA TGTCCGTGAC CACCCAGGCC GGGAACAGCA GCGAGCAGGC   960
       CATACCCACG GCAATGCTCC AGGCCTGTGT TGGCTCCTGG CTGGACAGGG AAAAGTGCAA  1020
       GCAATTTGTG GAGCAGCACA CGCCCCAGCT GCTGACCCTG GTGCCCAGGG GCTGGGATGC  1080
       CCACACCACC TGCCAGGCCC TCGGGGTGTG TGGGACCATG TCCAGCCCTC TCCAGTGTAT  1140
       CCACAGCCCC GACCTTTGAT GAGAACTCAG CTGTCCAGCT GCAAAGGAAA AGCCAAGTGA  1200
70     GACGGGCTCT GGGACCATGG TGACCAGGCT CTTCCCCTGC TCCCTGGCCC TCGCCAGCTG  1260
       CCAGGCTGAA AAGAAGCCTC AGCTCCCACA CCGCCCTCCT CACCTCCCTT CCTCGGCAGT  1320
       CACTTCCACT GGTGGACCAC GGGCCCCCAG CCCTGTGTCG GCCTTGTCTG TCTCAGCTCA  1380
       ACCACAGTCT GACACCAGAG CCCACTTCCA TCCTCTCTGG TGTGAGGCAC AGCGAGGGCA  1440
       GCATCTGGAG GAGCTCTGCA GCCTCCACAC CTACCACGAC CTCCCAGGGC TGGGCTCAGG  1500
75     AAAAACCAGC CACTGCTTTA CAGGACAGGG GGTTGAAGCT GAGCCCCGCC TCACACCCAC  1560
       CCCCATGCAC TCAAAGATTG GATTTTACAG CTACTTGCAA TTCAAATTC AGAAGAATAA  1620
       AAAATGGGAA CATACAGAAC TCTAAAAGAT AGACATCAGA AATTGTTAAG TTAAGCTTTT  1680
       TCAAAAAATC AGCAATTCCC CAGCGTAGTC AAGGGTGGAC ACTGCACGCT CTGGCATGAT  1740
       GGGATGGCGA CCGGGCAAGC TTTCTTCCTC GAGATGCTCT GCTGCTTGAG AGCTATTGCT  1800
80     TTGTTAAGAT ATAAAAAGGG GTTTCTTTTT GTCTTTCTGT AAGGTGGACT TCCAGATTTT  1860
       GATTGAAAGT CCTAGGGTGA TTCTATTTCT GCTGTGATTT ATCTGCTGAA AGCTCAGCTG  1920
       GGGTTGTGCA AGCTAGGGAC CCATTCCTGT GTAATACAAT GTCTGCACCA ATGCTAATAA  1980
       AGTCCTATTC TCTTTTAAAA AAAAAAAAAA AAAAAAAACG GAATTC              2026
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Seq ID NO: C61 DNA Sequence

1234

Nucleic Acid Accession #: NM_139172.1
Coding sequence: 19..552

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     1          11         21         31         41         51
     |          |          |          |          |          |
     GGGGTCTGGG GAGGTGACAT GTTGGGCTGT GGGATCCCAG CGCTGGGCCT GCTCCTGCTG    60
     CTGCAGGGCT CGGCAGACGG AAATGGAATC CAGGGATTCT TCTACCCATG GAGCTGTGAG   120
     GGTGACATAT GGGACCGGGA GAGCTGTGGG GGCCAGGCGG CCATCGATAG CCCCAACCTC   180
     TGCCTGCGTC TCCGGTGCTG CTACCGCAAT GGGGTCTGCT ACCACCAGCG TCCAGACGAA   240
     AACGTGCGGA GGAAGCACAT GTGGGCGCTG GTCTGGACGT CAGCGGCCT CCTCCTCCTG    300
     AGCTGCAGCA TCTGCTTGTT CTGGTGGGCC AAGCGCCGGG ACGTGCTGCA TATGCCCGGT   360
     TTCCTGGCGG GTCCGTGTGA CATGTCCAAG TCCGTCTCGC TGCTCTCCAA GCACCGAGGG   420
     ACCAAGAAGA CGCCGTCCAC GGGCAGCCGTG CCAGTCGCCC TGTCCAGGAT GTCCAGGGAT   480
     GTGGAGGGAG GCACCGAGGG GGAAGGGACG GAGGAGGGTG AGGAGACAGA GGGCGAGGAA   540
     GAGGAGGATT AGGGGAGTCC CCGGGGGACT GCTCAATACA GATACGGTGG ACG           593
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Seq ID NO: C62 DNA Sequence
Nucleic Acid Accession #: NM_054023.2
Coding sequence: 98..379

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     1          11         21         31         41         51
     |          |          |          |          |          |
     GGGGACACTT TGTATGGCAA GTGGAACCAC TGGCTTGGTG GATTTTGCTA GATTTTTCTG    60
     ATTTTTAAAC TCCTGAAAAA TATCCCAGAT AACTGTCATG AAGCTGGTAA CTATCTTCCT   120
     GCTGGTGACC ATCAGCCTTT GTAGTTACTC TGCTACTGCC TTCCTCATCA ACAAAGTGCC   180
     CCTTCCTGTT GACAAGTTGG CACCTTTACC TCTGGACAAC ATTCTTCCCT TTATGGATCC   240
     ATTAAAGCTT CTTCTGAAAA CTCTGGGCAT TTCTGTTGAG CACCTTGTGG AGGGGCTAAG   300
     GAAGTGTGTA AATGAGCTGG GACCAGAGGC TTCTGAAGCT GTGAAGAAAC TGCTGGAGGC   360
     GCTATCACAC TTGGTGTGAC ATCAAGATAA AGAGCGGAGG TGGATGGGGA TGGAAGATGA   420
     TGCTCCTATC CTCCCTGCCT GAAACCTGTT CTACCAATTA TAGATCAAAT GCCCTAAAAT   480
     GTAGTGACCC GTGAAAAGGA CAAATAAAGC AATGAATACT AAAAAAAAAA AAAAAAAAA    540
     AAAAAAAAAA                                                          550
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Seq ID NO: C63 DNA Sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..2874

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     TGGATGTCGA GAGGAGCATA TCAGCGGAGG AACACACGGG CAGCTGGACG TCCAGAGGAA   120
     TGCACTGACA GAAACTGGCA TGCTGGCAGA ACACGTGGAA TTTGGCTGGG GCAGTTGGAG   180
     GAGAGATGTT CAGATGTGTT CGGAGTTTCT TTCTTCTGGT GGGTTCGTGG TCTCGCTGGC   240
     TCAGGAGCGA AGCTGCAGAC CTTCACGCCA GCCCAGGAAG GGGCTCCCAC AGTGCAGCGG   300
     CAGGCTGAAG CGCTCCTCAA GTGCCGCCAG AGTGGGCGTC CAGGCAGAGG AGGCGCCGAG   360
     AGCGAGCGAG CGAGGGATGC CAGCATGCTG TCACCTCTCA GTGCTGCCAT GCGAAACTAC   420
     CCAACGTCCT CTACCATCCC TCCAAGAAGA TCCTACTCTC CAACCGAAAT TGCTCACAAG   480
     AGTTACTCCT GCAGCCTTCC AGACATGAAA ATCTCCATGG CAGAATCTGG CCCCTCCTTG   540
     GATAGCCTTG ACATTCTGGA GGATGGCGAG TCTGGGTCAC CATTTCTTGT GACTCATTTG   600
     TACTTTCTGG GGGTTGTCAC CACTGGGATG GAACAACTAG ATTTTGAAAC AGGACCAAAC   660
     ATATTTGATT TGCAGATTTA TGTGAAGGAT GAGGTTGGTG TCACAGACCT GCAAGTCCTG   720
     ACTGTCCAGG TAACAGATGT GAACGAGCCA CCTCAGTTTC AAGGCAACTT GGCAGAAGAT   780
     CATCTCCGTG CAGACCAGCC ACATTTCAAT GCTCATAGTC ACACGTACGT GAGGGTAGTG   840
     GCTACTGCAT TGGCCAGGCA CAGGCTTAGA TCTAGCATTG GTTCCCCCTT CCTGGGCACC   900
     TTCTGTGTTG TGGTGGGCAT GCAGTATTTC CTGATTTCTC CCCCAAAGAG CTTCAGAATG   960
     TCTGCTAATG GCACCCTCTT CTCCACAACA GAATTGGACT TTGAAGCAGG ACACAGAAGT  1020
     TTCCATCTCG TCGTGGAGGT GAGGGACAGT GGAGGCCTCA AAGCCTCCAC AGAGCTCCAG  1080
     GTGAACATCG TGAACCTCAA CGACGAAGTC CCTCGCTTTA CCAGCCCGAC ACGAGTGTAC  1140
     ACAGTCCTGG AGGAACTGAG TCCAGGAACC ATCGTGGCCA ATATCACAGC GGAGGATCCT  1200
     GATGATGAAG GTTTTCCCAG CCACCTCCTC TACAGCATTA CCACTGTTAG CAAATATTTC  1260
     ATGATAAATC AGTTGACTGG TACAATCCAA GTGGCCCAAA GGATAGACCG AGATGCAGGT  1320
     GAATTGAGAC AAAATCCCAC CATTTCCCTG GAAGTTCTAG TGAAGGACAG ACCATATGGG  1380
     GGTCAGGAGA ATCGCATCCA GATAACCTTC ATTGTGGAAG ACGTCAACGA CAATCCTGCC  1440
     ACATGCCAAA AGTTCACCTT CAGATCCAGT CTCCCACCCTG CTCTGTGCTC CAAGACGCTG  1500
     ACCTGGATGG ATACCGTATT AGACTGTTTT CATGCTGCTG ATAAAGATAT ACCTGTGACT  1560
     GGGCGATTTA CAAAAGAAAG AGGTTTAATT GGACTTACAG TTCCACATGG CTGGGGAAGC  1620
     CTCACAATCA TGCAGAAGGA CAAGGAGGAG CAAGTCACAT CTTACATGGA TGGCAGCAGG  1680
     CAAAGAGATA GAGCTTGTGT AGGGAAACTC CTCCTTATAA AGCCATCAGA TCTCATGAGA  1740
     CTTAGTCACT ATCACGAAGA CAACTCAGGA AAGACTTGCC CCCATGATTC CATTTCCTCC  1800
     TACCAGGTCC CTCCCACAAC ATGTAGGAAT TCAAGAATCC AGGCCACCAA CAACGAAGAC  1860
     ACAAGCTCTG TCACTGTTAC TGTGAACATC CTTGAAGAAA ATGATGAAAA GCCAATTTGT  1920
     ACTCCAAACT CTTATTTCCT GGCCCTCCCA GTGGATCTGA AAGTTGGCAC AAATATTCAG  1980
     AATTTCAAGC TGACATGTAC CGACCTTGAT TCCAGCCCCA GATCTTTCCG TTATTCCATT  2040
     GGCCCAGGTA ACGTCAACAA TCATTTCACC TTCTCTCCCA ATGCTGGTTC CAATGTCACA  2100
     CGCCTGCTGC TTACATCTCG CTTTGACTAT GCTGGTGGGT TTGATAAGAT CTGGGACTAC  2160
     AAGCTACTTG TCTACGTAAC TGATGACAAC TTGATGTCTG ACAGGAAGAA AGCGGAGGCT  2220
     CTTGTTGAGA CAGGAACAGT GACACTGAGT ATTAAAGTCA TTCCCCACCC AACCACTATC  2280
     ATCACCACGA CCCCCAGGCC CAGGGTCACC TATCAGGTCC TGAGGAAAAA CGTTTACTCT  2340
     CCATCTGCAT GGTACGTGCC GTTTGTCATC ACTTTGGGCT CCATATTGCT TCTGGGTCTC  2400
     CTCGTGTACC TGGTCGTCCT ATTGGCCAAA GCCATCCACA GACACTGCCC CTGCAAGACT  2460
     GGGAAGAACA AGGAACCTCT GACAAAGAAA GGAGAAACGA AGACTGCAGA GAGAGACGTC  2520
     GTGGTGGAAA CTATCCAGAT GAACACTATC TTTGATGGAG AAGCCATAGA TCCAGAGCCT  2580
     GAGCAAGCTT CACTCGAGCT CTATGCCCTG CTGCCCAGCT GCTGCGCACCC TAGTCCAGTA  2640
     ACCCTAAGAA AGGTCCAGGT GTGTGGGGAG AGTGAAGAGA CCGGTCAGTG TTCCGGCCAC  2700
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ATCACACTTC CCGGCAAGAT TCCAGTCGAT GACCCAAGGA AACAGGAAAC AGGCCTGCAG    2760
GGTGATTTCG AGGTCTGGAC TCTATGCCCC GCTGTGAAGG TGGTTGTAGG CAGCCCTCAA    2820
GCTGAACGGT GCATTCGATT GGCTCTCAGT CTGAAAAAGT ACAGTTCTGA TTAA          2874
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Seq ID NO: C64 DNA Sequence
Nucleic Acid Accession #: XM_168571.1
Coding sequence: 155..988

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TTCATGATAA ATCAGTTGAC TGGTACAATC CAAGTGGCCC AAAGGATAGA CCGAGATGCA    180
GGTGAATTGA GACAAAATCC CACCATTTCC CTGGAAGTTC TAGTGAAGGA CAGACCCATAT   240
GGGGGTCAGG AGAATCGCAT CCAGATAACC TTCATTGTGG AAGACGTCAA CGACAATCCT    300
GCCCACATGCC AAAAGTTCAC CTTCAGCATT ATGGTGCCGG AAAGAACAGC CAAGGGGACG    360
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TTCAACTTCA CCATGCCATC TGGAGTGGGG AGCGGCAGCA GATTTTTACA GGATCCAGCT    480
GGCTCTGGGA AGATTGTGCT GATTGGTGAT CTAGACTACG AAAATCCAAG TAACCTAGCA    540
GCCGGCAATA AATATACGGT GATAATCCAG GTGCAGGATG TGGCCCCCCC TTACTATAAA    600
AATAACGTCT ACGTTTATAT CCTAACAAGC CCAGAAAATG AGTTTCCTCT CATTTTTGAT    660
AGGCCATCCT ATGTATTTGA TGTGTCAGAA AGAAGGCCCG CCCAGGGTCA CCTATCAAGGT   720
CCTGAGGAAA AACGTTTACT CTCCATCTGC ATGGTACGTG CCGTTTGTCA TCACTTTGGG    780
CTCCATATTG CTTCTGGGTC TCCTCGTGTA CCTGGTCGTC CTATTGGCCA AAGCCATCCA    840
CAGACACTGC CCCTGCAAGA CTGGGAAGAA CAAGGAACCT CTGACAAAGA AAGGAGAAAC    900
GAAGACTGCA GAGAGAGACG TCGTGGTGGA AACTATCCAG ATGAACACTA TCTTTGATGG    960
AGAAGCCATA GATCCAGTGA CCGGGGAAAC ATATGAATTC AACTCAAAAA CTGGAGCCAG   1020
AAAGTGGAAA GATCCACTAA CCCAAATGCC AAAATGGAAA GAGTCCAGCC ACCAGGGAGC   1080
TGCCCCACGC AGAGTCACTG CTGGGGAAGG GATGGGGTCA CTGAGAAGTG CCAACTGGGA   1140
AGAAGATGAG CTGAGTGGCA AAGCGTGGGC TGAGGATGCT GGTCTGGGTT CCAGAAATGA   1200
GGGTGCGAAG CTGGGCAACC CAAAGAACAG AAATCCAGCC TTCATGAACA GGGCTTACCC   1260
CAAACCACAC CCAGGAAAGT AAACGGGGTC TAAGGAGGGG CCTGTCAATC ACTGAGATGC   1320
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TGAGGGGATT CAGACATCCA GGGTCAAACA TGGGATGTTT GACAAATTTT TAAACAAATA   1440
GAAAGGGGTT TGATCACATA GTTGCGTGTT CTGAAATGAT ACAGGAACAT TTTCTATCAG   1500
ATTTCAGAAC TACCTGTGCT TCTGATAAGC AAGACTGTTA ACTTTGGGGT GTGGAATTGT   1560
TGTGTTTCTT CTTTGCATTG ACTGCTAGGA AGCTCTATTC TGTTCACCAT AGAAAGTTTG   1620
TAGGAATTCC TGACATAAAT AGTGAAGACT ATCCTTACAT CTGGTTTCCA CCTTATTTTC   1680
CTGCCCTCGT TTTAACATCA CCCAGATTTC TTCAGTTATA AATATGCCAT ACACCTTTGT   1740
AAGTCACCTC AAATCTTCTT CAAAAGAAGC AGAACAGTGA AAAAAACAGA TGAGTAAGTT   1800
AAGAGTTGGT CATCTGGAAA GAAGAAAACT CAGTAGGCAC CTTCTTTTGT TTTTTCTTGT   1860
GGTGTCCGGA TCAGCATCCT GCATGTGAGA TTCATCCACG TTGTCCTGTC TAGCAGTAGT   1920
TCAGTTCTCT TCATGGTTAT GTCTGGTTTC ATTCTATGAT TATATCACAA TTTATCTATT   1980
CTACACTTGG GTGGCAGCTGA CTTCAGATTT TTTACTTTTA AAAAATATAC TTAAAAGTGA   2040
ACTACAGGCA GGGCATGATG GCTCATGCCT GTAATGCCAG CACTTTGCCA AGGTGGGCAG   2100
ATCACCTAAG GTCAGGAGTT CAAGATCAGC CTGGCCTAGA TGGCAAAACC CTGTCTCTAC   2160
TAAAAAATAC AAAAATTAGC TTGGTGTGGT GGTGGGCACA TGTAATCCCA GCTACTTGGG   2220
AGGCTGAGGT AGGGAGAACT GCTTAAACCT GAGAGGTGGA GGTTACAGTG AGTTGAGATT   2280
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AAGTGAATTA CAACACT                                                   2357
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Seq ID NO: C65 DNA Sequence
Nucleic Acid Accession #: NM_005266.3
Coding sequence: 122..1198

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GGTAGGCAAG GTCTGGCTCA CTGTCCTCTT CATATTCCGT ATGCTCGTGC TGGGCACAGC    240
TGCTGAGTCT TCCTGGGGGG ATGAGCAGGC TGATTTCCGG TGTGATACGA TTCAGCCTGG    300
CTGCCAGAAT GTCTGCTACG ACCAGGCTTT CCCCATCTCC CACATTCGCT ACTGGGTGCT    360
GCAGATCATC TTCGTCTCCA CGCCCTCTCT GGTGTACATG GGCCACGCCA TGCACACTGT    420
GCGCATGCAG GAGAAGCGCA AGCTACGGGA GGCCGAGAGG GCCAAAGAGG TCCGGGGCTC    480
TGGCTCTTAC GAGTACCCGG TGGCAGAGAA GGCAGAACTG TCCTGCTGGG AGGAAGGGAA    540
TGGAAGGATT GCCCTCCAGG GCACTCTGCT CAACACCTAT GTGTGCAGCA TCCTGATCCG    600
CACCACCATG GAGGTGGGCT TCATTGTGGG CCAGTACTTC ATCTACGGA TCTTCCTGAC     660
CACCCTGCAT GTCTGCCGCCA GGAGTCCCTG TCCCCACCCG GTCAACTGTT ACGTATCCCG   720
GCCCACAGAG AAGAATGTCT TCATTGTCTT TATGCTGGCT GTGGCTGCAC TGTCCCTCCT    780
CCTTAGCCTG GCTGAACTCT ACCACCTGGG CTGGAAGAAG ATCAGACAGC GATTTGTCAA    840
ACCGCGGCAG CACATGGCTA AGTGCCAGCT TTCTGGCCCC TCTGTGGGCA TAGTCCAGAG    900
CTGCACACCA CCCCCCGACT TTAATCAGTG CCTGGAGAAT GGCCCTGGGG GAAAATTCTT    960
CAATCCCTTC AGCAATAATA TGGCCTCCCA ACAAAACACA GACAACCTGG TCACCGAGCA   1020
AGTACGAGGT CAGGAGCAGA CTCCTGGGGA AGGTTTCATC CAGGTTCGTT ATGGCCAGAA   1080
GCCTGAGGTG CCCAATGGTG TCTCACCAGG TCACCGCCTT CCCCATGGCT ATCATAGTGA   1140
CAAGCGACGT CTTAGTAAGG CCAGCAGCAA GGCAAGGTCA GATGACCTAT CAGTGTGACC   1200
CTCCTTTATG GGAGGATCAG GACCAGGTGG GAACAAAGGA GGCTCAGAGA GGAAAGACGT   1260
GTCCCTTCTG AACTGATGCT TTCTCACTGT CATCACTGCT TGGCTCCTTT GAGCCCCGGG   1320
TCTCAATGAC GTTGCTCATT AATTCTAGAA ACTATAACCA GGGCTCTGGG ATAGTAAGAG   1380
AGGTGACAAC CCACCCAGAC TGCAGTTCCC TCCCCACCCT CTACCCAGTA TACGAAGCCT   1440
TTCAGATTAC TCATGAAACA GGGTAGAGGG AAAGAAGGGA AGCATGGCAA AAGCTGGCCT   1500
GGAAGGGATA GCCAGAGGGA TAGAATGACT CTCTCTCTAC ATACCAGCAG CATACCAAAT   1560
GCGTTCTCTA AGTTCCTACC TCCTTGACCT GATCACCCTC CTCCTCCAA GGAAGAGCTC    1620
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AAAGTTCCCA GCCAATAGAC AGCATGAATC AAGGAACTTG CATTATATGT GCTCTTGAAT   1680
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CTTCTCCTCC CTCTACTCAG CCTTAAAAAG GGCTTCTTGG AACTTTACCA GCAGCCTCAG   1800
CTTTACAAAT GCCTTGGTAT GTACCTCTGG CAAATGCCCT GGTATGTACC TCTGGCAAAT   1860
GCCCCACCTT GGTGATGTTG CAACCTTTCC TTCTGCTAGG GTGTACACCT AGCCTGTGCA   1920
GGTGTCAGCC CTGCTAGGGA GTCACTGTAC ACACAAACTC TACTGGAATT CCTGCCAACA   1980
TCTGTCACCC TGCAGCTCCT TTACAGTTCA ATCCAATGAT AGAAACCATC CCTTCCCTTT   2040
CTCCCTTGGC TGTTCACCCA GCCATTCCCT GAAGGCCTTA CCAACAGGAA TATCCAAGAA   2100
GCTGTTGTCC TCTCTCGAAC CCTGACCAGA TCATCAGCCA CTGAGGCCAG TGGAATTTCC   2160
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Seq ID NO: C66 DNA Sequence
Nucleic Acid Accession #: NM_014459.2
Coding sequence: 738..3407

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GCAGCAAAAC ACTGCCTGAA AACAGACCGG CCCGCGCAGC AAGCAGACAT TTCACGGTGC   120
GCTGGGGAAG CTTCAAAATA TATCTGTGAC TCTGTCTTCG TTGCTCTTCA TCCCCATCAA   180
TTTCATCACG GGAGGCGAGC AGCAAGTAAG AATTTCACTT TCGGATCTGC CTAGAGACAC   240
ACCTCCCTGC TCCCTCCCCC ACTCGATGTG AAGAGTATTC CGGAGTCTCC GGGCGGGAGT   300
AGATTTGCAG CACCCTAGCG GGAGCGAGGA AAACCTACTG ATTCTTTAGC TCATTATCAT   360
CTCTCCCAGA CGAGATTTCC TTCTTATCGC CTGCCTCATC GCTCAAGTTT GAGCCTCCCG   420
AAGTCCGGGC GGGAGAGACG AAACCCCTGG CTCACCCCCA GCCGCAGGAA GCCACCGCCT   480
TGCTCCAAGC CCCTGCAGCT CTGCTGCACC GCAGCTTCTC ACCCAGTGCG GATGCTGTAG   540
ATCAACAGGT TCAGGGAACT TGAGCAGAAT AAGGAGAGAC CACCGGGTGC CGCAGCTCGG   600
GTGCAGAGGG AAAAAAGGAC CCATAGACTT GTGGCTCGCG TCGCGCGCGC ACGCTGCGCC   660
AGGGCCCCAG GCTGGCGCGC ACTCCCTCTC TGGCTCCTCC AGTCCGATTG CTCCTGCCCC   720
CACCTTACAG GTCTGGGATG TACCTTTCCA TCTGTTGCTG CTTTCTTCTA TGGGCCCCTG   780
CCCTCACTCT CAAGAACCTC AACTACTCCG TGCCGGAGGA GCAAGGGGCC GGCACGGTGA   840
TCGGGAACAT CGGCAGGGAT GCTCGACTGC AGCCTGGGCT TCCGCCTGCA GAGCGCGGCG   900
GCGGAGGGCG CAGCAAGTCG GGTAGCTACC GGGTGCTGGA GAACTCCGCA CCGCACCTGC   960
TGGACGTGGA CGCAGACAGC GGGCTCCTCT ACACCAAGCA GCGCATCGAC CGCGAGTCCC   1020
TGTGCCGCCA CAATGCCAAG TGCCAGCTGT CCCTCGAGGT GTTCGCCAAC GACAAGGAGA   1080
TCTGCATGAT CAAGGTAGAG ATCCAGGACA TCAACGACAA CGCGCCCTCC TTCTCCTCGG   1140
ACCAGATCGA AATGGACATC TCGGAGAACG CTGCTCCGGG CACCCGCTTC CCCCTCACCA   1200
GCGCACATGA CCCCGACGCC GGCGAGAATG GGCTCCGCAC CTACCTGCTC ACGCGCGACG   1260
ATCACGGCCT CTTTGGACTG GACGTTAAGT CCCGCGGCGA CGGCACCAAG TTCCCAGAAC   1320
TGGTCATCCA GAAGGCTCTG GACCGCGAGC AACAGAATCA CCATACGCTC GTGCTGACTG   1380
CCCTGACGG TGGCGAGCCT CCACGTTCCG CCACCGTACA GATCAACGTG AAGGTGATTG   1440
ACTCCAACGA CAACAGCCCG GTCTTCGAGG CGCCATCCTA CTTGGTGGAA CTGCCCGAGA   1500
ACGCTCCGCT GGGTACAGTG GTCATCGATC TGAACGCCAC CGACGCCGAT GAAGGTCCCA   1560
ATGGTGAAGT GCTCTACTCT TTCAGCAGCT ACGTGCCTGA CCGCGTGCGG GAGCTCTTCT   1620
CCATCGACCC CAAGACCGGC CTAATCCGTG TGAAGGGCAA TCTGGACTAT GAGGAAAACG   1680
GGATGCTGGA GATTGACGTG CAGGCCCGAG ACCTGGGGCC TAACCCTATC CCAGCCCACT   1740
GCAAAGTCAC GGTCAAGCTC ATCGACCGCA ACGACAATGC GCCGTCCATC GGTTTCGTCT   1800
CCGTGCGCCA GGGGGCGCTG AGCGAGGCGG CCCCTCCCGG CACCGTCATC GCCCTGGTGC   1860
GGGTCACTGA CCGGGACTCT GGCAAGAACG GACAGCTGCA GTGTCGGGTC CTAGGCGGAG   1920
GAGGGACGGG CGGCGGCGGG GGCCTGGGCG GGCCCGGGGG TTCCGTCCCC TTCAAGCTTG   1980
AGGAGAACTA CGACAACTTC TACACGGTGG TGACTGACCG CCCGCTGGAC CGCGAGACAC   2040
AAGACGAGTA CAACGTGACC ATCGTGGCGC GGGACGGGGG CTCTCCTCCC CTCAACTCCA   2100
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TCGCCCAGGA TCCCGACCTG GGCCAGAACG GCACCGTATC CTACTCTATC CTGCCCTCGC   2280
ACATCGGCGA CGTGTCTATC TACACCTATG TGTCTGTGAA TCCCACGAAC GGGGCCATCT   2340
ACGCCCTGCG CTCCTTTAAC TTCGAGCAGA CCAAGGCTTT TGAGTTCAAG GTGCTTGCTA   2400
AGGACTCGGG GGCGCCCGCG CACTTGGAGA GCAACGCCAC GGTGAGGGTG ACAGTGCTAG   2460
ACGTGAATGA CAACGCGCCA GTGATCGTGC TCCCCACGCT GCAGAACGAC ACCGCGGAGC   2520
TGCAGGTGCC GCGCAACGCT GGCCTGGGCT ATCTGGTGAG CACTGTGCGC GCCCTAGACA   2580
GCGACTTCGG CGAGAGCGGG CGTCTCACCT ACGAGATCGT GGACGGCAAC GACGACCACC   2640
TGTTTGAGAT CGACCCGTCC AGCGGCGAGA TCGGCACGCT GCACCCTTTC TGGGAGGACG   2700
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CAGTGGCCAA GCTCATCATC CGCTCGGTGA GCGGATCCCT TCCCGAGGGG GTACCACGGG   2820
TGAATGCGGA GCAGCACCAC TGGGACATGT CGCTGCCGCT CATCGTGACT CTGAGCACTA   2880
TCTCCATCAT CCTCCTAGCG GCCATGATCA CCATCGCCGT CAAGTGCAAG GCGCAGAACA   2940
AGGAGATCCG CACTTACAAC TGCCGCATCG CCGAGTACAG CCACCGCAG CTGGGTGGGG   3000
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ATCTCAAACC GGCCTCCAAC AACCTGACTG TCCCTCAGGG GCACGCGGGC TGCCACACCA   3240
GCTTCACCGG ACAAGGGACT AATGCAAGCG AGACCCCTGC CACTCGGATG TCCATAATTC   3300
AGACAGACAA TTTTCCCGCA GAGCCCAATT ACATGGGCAG CAGGCAGCAG TTTGTTCAAA   3360
GTATTTCAGT AGCTCCACGT TTAAGGACCC AGAAAGAGCC AGCCTGAGAG ACAGTGGGCA   3420
CGGGGACAGT GATCAGGCTG ACAGTGACCA AGACACTAAC AAAGGCTCCT GCTGTGACAT   3480
GTCTGTTAGG GAGGCACTCA AGATGAAAAC TACTTCAACT AAAAGCCAAC CACTTGAACA   3540
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TCTCTTTGTA CCTACAGTTG AAGCTAATGT TGAGACTGAG ACTTACGAAA CTGTGAATCC   3720
CACTGGGAAA AAGACTTTTT GTACATTTGG AAAAGACAAG CGAGAGCACA CTATTCTCAT   3780
TGCCAACGTT AAACCTTATT TAAAAGCCAA ACGTGCCCTG AGCCCTCTCC TCCAAGAGGT   3840
CCCCTCAGCA TCAAGCAGCC CAACCAAGGC GTGCATCGAG CCTTGCACCT CAACAAAAGG   3900
CTCCCTGGAT GGCTGTGAAG CAAAACCCAGG AGCCCTGCTT GAAGCAAGCA GTCAGTACTT   3960
GCCCACTGAC AGTCAATATC TGTCACCTAG TAAGCAACCA AGAGACCCTC CCTTCATGGC   4020
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CGACCCTGTG GCTGTGAGAA AGTGAAAAAA GAAAAAAAAA AAGGCATTGG CATTTTCTTG   4260
TCTCTTCTGT TGATTTAAAA ATGATCCCTC CTGGTGATAA CCCATTTTAC AGGGATGAAG   4320
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TTCCACTGCT GATTTCTTTT TCAGAGATAA CAATGGTTTC GTTTTGACCA AACTTGTATT   4440
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TGAGAACTGA AGTATTTCTG ATCACTCTCA GACTGTCCTC CGTGATTTAT GCTGACTTAA   4620
CTGTTTACCT ATAAACCCCA TACAAAGCAG GGTCATAATT TGTGATCTGT GGTGGATTTC   4680
TAGCAGTCAT CACAGGCTTC TACTGAAAGT CCTGAAAAGA CCTTGCAGTA GTCCAAGCTA   4740
CACCAAACAT TAACACATAT TTGTGGTAAA CATTTCTGTA TAAAGTTACC TGACACACAT   4800
ATAAACACAA GGAACATTCC ATATGCATTAG TCGAAAACAA AAACAAAAAA AAAACCTTTG   4860
GTCATTTGTA AGACATCTCA TGTCATATAA AAGTTAAATG TAAAAAGATA CAGTCCATTT   4920
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Seq ID NO: C67 DNA Sequence
Nucleic Acid Accession #: NM_005601.2
Coding sequence: 101..598

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TCTTCCTCCT CCAGGACCCA GAAGCCCTGA GCTTATCCCC ATGGAGCTCT GCCGGTCCCT   120
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CTGGTTTGAG GCTGTGGGTC CCACCCACTC AGCTCACTCG GGCCTCTGGC CAACAGGGCA   240
TGGGGACATC ATATCAGGCT ACATCCACGT GACGCAGACC TTCAGCATTA TGGCTGTTCT   300
GTGGGCCCTG GTGTCCGTGA GCTTCCTGGT CCTGTCCTGC TTCCCCTCAC TGTTCCCCCC   360
AGGCCACGGC CCGCTTGTCT CAACCACCGG AGCCTTTGCT GCAGCCATCT CCATGGTGGT   420
GGCCATGGCG GTGTACACCA GCGAGCGGTG GGACCAGCCT CCACACCCCC AGATCCAGAC   480
CTTCTTCTCC TGGTCCTTCT ACCTGGGCTG GGTCTCAGCT ATCCTCTTGC TCTGTACAGG   540
TGCCCTGAGC CTGGGTGCTC ACTGTGGCGG TCCCCGTCCT GGCTATGAAA CCTTGTGAGC   600
AGAAGGCAAG AGCGGCAAGA TGAGTTTTGA GCGTTGTATT CCAAAGGCCT CATCTGGAGC   660
CTCGGGAAAG TCTGGTCCTA CATTTGCCCG CCCTTCCAGC CCTTCCCCAG CCCCTCCTCT   720
TGTTTCTTCA TTCATTCAAC AAAATTTGGC TGGAAAAAAA AAAAAAAAAA AAAAAAAAAA   780
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Seq ID NO: C68 DNA Sequence
Nucleic Acid Accession #: NM_006433.2
Coding sequence: 129..566

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GTATCTGTGG TAAACCCAGT GACACGGGGG AGATGACATA CAAAAAGGGC AGGACCTGAG   60
AAAGATTAAG CTGCAGGCTC CCTGCCCATA AAACAGGGTG TGAAAGGCAT CTCAGCGGCT   120
GCCCCACCAT GGCTACCTGG GCCCTCCTGC TCCTTGCAGC CATGCTCCTG GGCAACCCAG   180
GTCTGGTCTT CTCTCGTCTG AGCCCTGAGT ACTACGACCT GGCAAGAGCC CACCTGCGTG   240
ATGAGGAGAA ATCCTGCCCG TGCCTGGCCC AGGAGGGCCC CCAGGGTGAC CTGTTGACCA   300
AACACAGGA GCTGGGCCGT GACTACAGGA CCTGTCTGAC GATAGTCCAA AAACTGAAGA   360
AGATGGTGGA TAAGCCCACC CAGAGAAGTG TTTCCAATGC TGCGACCCGG GTGTGTAGGA   420
CGGGGAGGTC ACGATGGCGC GACGTCTGCA GAAATTTCAT GAGGAGGTAT CAGTCTAGAG   480
TTACCCAGGG CCTCGTGGCC GGAGAAACTG CCCAGCAGAT CTGTGAGGAC CTCAGGTTGT   540
GTATACCTTC TACAGGTCCC CTCTGAGCCC TCTCACCTTG TCCTGTGGAA GAAGCACAGG   600
CTCCTGTCCT CAGATCCCGG GAACCTCAGC AACCTCTGCC GGCTCCTCGC TTCCTCGATC   660
CAGAATCCAC TCTCCAGTCT CCCTCCCCTG ACTCCCTCTG CTGTCCTCCC CTCTCACGAG   720
AATAAAGTGT CAAGCAAG                                       738
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Seq ID NO: C69 DNA Sequence
Nucleic Acid Accession #: NM_002985.2
Coding sequence: 69..344

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GCTGCAGAGG ATTCCTGCAG AGGATCAAGA CAGCACGTGG ACCTCGCACA GCCTCTCCCA   60
CAGGTACCAT GAAGGTCTCC GCGGCAGCCC TCGCTGTCAT CCTCATTGCT ACTGCCCTCT   120
GCGCTCCTGC ATCTGCCTCC CCATATTCCT CGGACACCAC ACCCTGCTGC TTTGCCTACA   180
TTGCCCGCCC ACTGCCCCGT GCCCACATCA AGGAGTATTT CTACACCAGT GGCAAGTGCT   240
CCAACCCAGC AGTCGTCTTT GTCACCCGAA AGAACCGCCA AGTGTGTGCC AACCCAGAGA   300
AGAAATGGGT TCGGGAGTAC ATCAACTCTT TGGAGATGAG CTAGGATGGA GAGTCCTTGA   360
ACCTGAACTT ACACAAATTT GCCTGTTTCT GCTTGCTCTT GTCCTAGCTT GGGAGGCTTC   420
CCCTCACTAT CCTACCCCAC CCGCTCCTTG AAGGGCCCAG ATTCTACCAC ACAGCAGCAG   480
TTACAAAAAC CTTCCCCAGG CTGGACGTGG TGGCTCACGC CTGTAATCCC AGCACTTTGG   540
GAGGCCAAGG TGGGTGGATC ACTTGAGGTC AGGAGTTCGA GACCAGCCTG GCCAACATGA   600
TGAAACCCCA TCTCTACTAA AAATACAAAA AATTAGCCGG GCGTGGTAGC GGGCGCCTGT   660
AGTCCCAGCT ACTCGGGAGG CTGAGGCAGG AGAATGGCGT GAACCCGGGA GGCGGAGCTT   720
GCAGTGAGCC GAGATCGCGC CACTGCACTC CAGCCTGGGC GACAGAGCGA GACTCCGTCT   780
CAAAAAAAAA AAAAAAAAAA AAAATACAAA AATTAGCCGG GCGTGGTGGC CCACGCCTGT   840
AATCCCAGCT ACTCGGGAGG CTAAGGCAGG AAAATTGTTT GAACCCAGGA GGTGGAGGCT   900
GCAGTGAGCT GAGATTGTGC CACTTCACTC CAGCCTGGGT GACAAAGTGA GACTCCGTCA   960
CAACAACAAC AACAAAAAGC TTCCCCAACT AAAGCCTAGA AGAGCTTCTG AGGCGCTGCT   1020
TTGTCAAAAG GAAGTCTCTA GGTTCTGAGC TCTGGCTTTG CCTTGGCTTG GCCAGGGCTC   1080
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TGTGACCAGG AAGGAAGTCA GCATGCCTCT AGAGGCAAGG AGGGGAGGAA CACTGCACTC   1140
TTAAGCTTCC GCCGTCTCAA CCCCTCACAG GAGCTTACTG GCAAACATGA AAAATCGGCT   1200
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Seq ID NO: C70 DNA Sequence
Nucleic Acid Accession #: NM_022154.2
Coding sequence: 1381..1722

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CATATGTACG CAAATCCTGG GGCGTTTGCA AACCCGGATC CGGGGCGTCT GGCCCCATGC   120
CCGGCCGGGC GTTTGAGGGC TACTGCCACG CAGCGTTTCT GGAGCCTGCC GGCTGGTGCC   180
CTGGTGGCCT TTATCTCTGT CCCCCTTTGT CCTCTTTATC TCAGGCTCTC CAGGAGGCCG   240
GGGGGCCCAC TCCGCCTATC GCTCCCCTCG GCTACGCTGC CACTCCAATG CCCCGCAGGT   300
CGCGAGCTGC TGTTCTTTCG AAGGCGCCGG AGAACCAGGG GCGTCCCGCG CCACCTCTGA   360
CTCGGAGCAG CGCCGAGCAC TGACGCTCCC GCCCTTGGGC AAGGACGCCA GTGCGCCCGC   420
GCGCGTCCCT CTGCGCGGCA GCCCGTCGCG GGCCCTCAAG GGGAAGCCCA GGCCAGGATG   480
GCCCCGGGTC GCGCGGTGGC CGGGCTCCTG TTGCTGGCGG CCGCCGGGCCT CGGAGGAGTG   540
GCGGAGGGGC CAGGGCTAGC CTTCAGCGAG GATGTGCTGA GCGTGTTCGG CGCGAATCTG   600
AGCCTGTCGG CGGCGCAGCT CCAGCACTTG CTGGAGCAGA TGGGAGCCGC CTCCCGCGTG   660
GGCGTCCCGG AGCCTGGCCA GCTGCACTTC AACCAGTGTT TAACTGCTGA AGAGATCTTT   720
TCCCTTCATG GCTTTTCAAA TGCTACCCAA ATAACCAGCT CCAAATTCTC TGTCATCTGT   780
CCAGCAGTCT TACAGCAATT GAACTTTCAC CCATGTGAGG ATCGGCCCAA GCACAAAACA   840
AGACCAAGTC ATTCAGAAGT TTGGGGATAT GGATTCCTGT TATTAATCTG   900
GCATCTCTCC TCGGATTGAT TTTGACTCCA CTGATAAAGA AATCTTATTT CCCAAAGATT   960
TTGACCTTTT TTGTGGGGCT GGCTATTGGG ACTCTTTTTT CAAATGCAAT TTTCCAACTT   1020
ATTCCAGAGG CATTTGGATT TGATCCCAAA GTCGACAGTT ATGTTGAGAA GGCAGTTGCT   1080
GTGTTTGGTG GATTTTACCT ACTTTTCTTT TTTGAAAGAA TGCTAAAGAT GTTATTAAAG   1140
ACATATGGTC AGAATGGTCA TACCCACTTT GGAAATGATA ACTTTGGTCC TCAAGAAAAA   1200
ACTCATCAAC CTAAAGCATT ACCTGCCATC AATGGTGTGA CATGCTATGC AAATCCTGCT   1260
GTCACAGAAG CTAATGGACA TATCCATTTT GATAATGTCA GTGTGGTATC TCTACAGGAT   1320
GGAAAAAAAG AGCCAAGTTC ATGTACCTGT TTGAAGGGGC CCAAACTGTC AGAAATAGGG   1380
ACGATTGCCT GGATGATAAC GCTCTGCGAT GCCCTCCACA ATTTCATCGA TGGCCTGGCG   1440
ATTGGGGCTT CCTGCACCTT GTCTCTCCTT CAGGGACTCA GTACTTCCAT AGCAATCCTA   1500
TGTGAGGAGT TTCCCCACGA GTTAGGAGAC TTTGTGATCC TACTCAATGC AGGGATGAGC   1560
ACTCGACAAG CCTTGCTATT CAACTTCCTT TCTGCATGTT CCTGCTATGT TGGGCTAGCT   1620
TTTGGCATTT TGGTGGGCAA CAATTTCGCT CCAAATATTA TATTTGCACT TGCTGGAGGC   1680
ATGTTCCTCT ATATTTCTCT GGCAGATATG TTTCCAGAGA TGAATGATAT GCTGAGAGAA   1740
AAGGTAACTG GAAGAAAAAC CGATTTCACC TTCTTCATGA TTCAGAATGC TGGAATGTTA   1800
ACTGGATTCA CAGCCATTCT ACTCATTACC TTGTATGCAG GAGAAATCGA ATTGGAGTAA   1860
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AGGATTTTGA AGCTGATCCT ATTTAGTTAA AAAGATAATT TTGCTTTCAA CTGTAGGTCC   1980
AGAAAACTAA TTATTGGCAT CAGTCTGTGA AATAGTCCAT TATTTGTTGT TAAAAATGCT   2040
TCAAAAGGTT TTCAGTGTCA GTCTGAGATG CCTGGTATAT AGGAGCCTTT GGGAAATACT   2100
TATTTTTCAG TATTCCATGC ATATTAGATA TCACCATGAA GCAAGAGACA TGCATTCTAT   2160
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CTCTATGGTA GGATCAAAGA TTCAAATGGT TTCAGAGAGG TTTTATTTCA ATTAATTTGT   2280
TCTAGTGCTT TCAAGAGCAA GTACATCAAA ATGTAGAAGG TAAAATGTAT GCAACACTAA   2340
TATAAATTAT TCCAAGTCTT TAAGGAGCCA AAGAAAAAA AGATTTCTCA CAGCTTTTTG   2400
TTCTGTTTTG TATTTCAATT AGGAACTTGC AGTATTATTT TGAAAACCAT TCTAAAATAA   2460
TAGGAGTTAG GAAATAAATA AAGTTTTGCT AGCCCTGCTA AGTTCAGGCT TAGAGGCTTA   2520
TCGCTAAGTN TAAACTTCAC CAGATTCCAC GAAAAGCTGG ATAGCTTTTT TTCTGACTTA   2580
TGTTGTGGTT GCACCCCTCA CAAATGGCAG AACAGTATGT AAAGCTGGTA ACACCTCGGT   2640
TTCAGTGCAC CATGTGTTTG CTTTGTGAAG GTGAAGAATA TGTTGGTTTA GAGAAAGAAA   2700
TTGGATGTAA TTTTATGCAA TTTACTTTTA AAGACAAACA TAACTATTTA GCAGAGAATA   2760
TTTTAATAAA TGCAAAACAA CAGCTGGACT GCTGTACATC AAGGACAGAT TAACTGGAAA   2820
ACATATGTTC CTTATGTGTG ATTGAGAGCC ATTCAGAAAA GACTTCCTTT GTGTTCAGCC   2880
TATACTTTTC CATATGGTAT ACCTTGAAAA AAATTAGCAC ACCATGGTTA TTTTTCTACC   2940
TTTTATAAAA GACAGAGCCT GTTTACTCAT TTAGAAGATA GGAAAAATTG GTCTAAAATT   3000
GAACATCCTA GATTCACACT CCCAAGTCAC TTAAGGTGAT TTGATGGTGA GGAAAATGAT   3060
TGACAAAGCC CAACAATGAT CTCAGGAATT ACATTTTCCA ACAGACCAAA AAATGTTTTC   3120
ATGTAGCAGC AATGCAGATT TGGTGAATAT TTAATATATA TTTTAGTATG TATTTCACTT   3180
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Seq ID NO: C71 DNA Sequence
Nucleic Acid Accession #: NM_004184.2
Coding sequence: 188..1603

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CTCGTCTGCA GAACAAATCC TCTGACCTCA GGCCGGCTGT GAACGTAGTT CCTGAGAGAT   180
AGCAAACATG CCCAACAGTG AGCCGCATC TCTGCTGGAG CTGTTCAACA GCATCGCCAC   240
ACAAGGGGAG CTCGTAAGGT CCCTCAAAGC GGGAAATGCC TCAAAGGATG AAATTGATTC   300
TGCAGTAAAG ATGTTGGTGT CATTAAAAAT GAGCTACAAA GCTGCCGCGG GGGAGGAATTA   360
CAAGGCTGAC TGTCCTCCAG GGAACCCAGC ACCTACCAGT AATCATGGCC CAGATGCCAC   420
AGAAGCTGAA GAGGATTTTG TGGACCCATG GACAGTACAG ACAAGCAGTG CAAAAGGCAT   480
AGACTACGAT AAGCTCATTG TTCGGTTTGG AAGTAGTAAA ATTGACAAAG AGCTAATAAA   540
CCGAATAGAG AGAGCCACCG GCCAAAGACC ACACCACTTC CTGCCGCGAAG GCATCTTCTT   600
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      CTCACACAGA GATATGAATC AGGTTCTTGA TGCCTATGAA AATAAGAAGC CATTTTATCT   660
      GTACACGGGC CGGGGCCCCT CTTCTGAAGC AATGCATGTA GGTCACCTCA TTCCATTTAT   720
      TTTCACAAAG TGGCTCCAGG ATGTATTTAA CGTGCCCTTG GTCATCCAGA TGACGGATGA   780
      CGAGAAGTAT CTGTGGAAGG ACCTGACCCT GGACCAGGCC TATGGCGATG CTGTTGAGAA   840
      TGCCAAGGAC ATCATCGCCT GTGGCTTTGA CATCAACAAG ACTTTCATAT TCTCTGACCT   900
      GGACTACATG GGGATGAGCT CAGGTTTCTA CAAAAATGTG GTGAAGATTC AAAAGCATGT   960
      TACCTTCAAC CAAGTGAAAG GCATTTTCGG CTTCACTGAC AGCGACTGCA TTGGGAAGAT  1020
      CAGTTTTCCT GCCATCCAGG CTGCTCCCTC CTTCAGCAAC TCATTCCCAC AGATCTTCCG  1080
      AGACAGGACG GATATCCAGT GCCTTATCCC ATGTGCCATT GACCAGGATC CTTACTTTAG  1140
      AATGACAAGG GACGTCGCCC CCAGGATCGG CTATCCTAAA CCAGCCCTGT TGCACTCCAC  1200
      CTTCTTCCCA GCCCTGCAGG GCGCCCAGAC CAAAATGAGT GCCAGCGACC CAAACTCCTC  1260
      CATCTTCCTC ACCGACACGG CCAAGCAGAT CAAAACCAAG GTCAATAAGC ATGCGTTTTC  1320
      TGGAGGGAGA GACACCATCG AGGAGCACAG GCAGTTTGGG GGCAACTGTG ATGTGGACGT  1380
      GTCTTTCATG TACCTGACCT TCTTCCTCGA GGACGACGAC AAGCTCGAGC AGATCAGGAA  1440
      GGATTACACC AGCGGAGCCA TGCTCACCGG TGAGCTCAAG AAGGCACTCA TAGAGGTTCT  1500
      GCAGCCCTTG ATCGCAGAGC ACCAGGCCCG GCGCAAGGAG GTCACGGATG AGATAGTGAA  1560
      AGAGTTCATG ACTCCCCGGA AGCTGTCCTT CGACTTTCAG TAGCACTCGT TTTACATATG  1620
      CTTATAAAAG AAGTGATGTA TCAGTAATGT ATCAATAATC CCAGCCCAGT CAAAGCACCG  1680
      CCACCTGTAG GCTTCTGTCT CATGGTAATT ACTGGGCCTG GCCTCTGTAA GCCTGTGTAT  1740
      GTTATCAATA CTGTTTCTTC CTGTGAGTTC CATTATTTCT ATCTCTTATG GGCAAAGCAT  1800
      TGTGGGTAAT TGGTGCTGGC TAACATTGCA TGGTCGGATA GAGAAGTCCA GCTGTGAGTC  1860
      TCTCCCAAA GCAGCCCCAC AGTGGAGCCT TCGGCTGGAA GTCCATGGGC CACCCTGTTC  1920
      TTGTCCATGG AGGACTTCCG AGGGTTCCAA GTATACTCTT AAGACCCACT CTGTTTAAAA  1980
      ATATATATTC TATGTATGCG TATATGGAAT TGAAATGTCA TTATTGTAAC CTAGAAAGTG  2040
      CTTTGAAATA TTGATGTGGG GAGGTTTATT GAGCACAAGA TGTATTTCAG CCCATGCCCC  2100
      CTCCCAAAAA GAAATTGATA AGTAAAAGCT TCGTTATACA TTTGACTAAG AAATCACCCA  2160
      GCTTTAAAGC TGCTTTTAAC AATGAAGATT GAACAGAGTT CAGCAATTTT GATTAAATTA  2220
      AGACTTGGGG GTGAAACTTT CCAGTTTACT GAACTCCAGA CCATGCATGT AGTCCACTCC  2280
      AGAAATCATG CTCGCTTCCC TTGGCACACC AGTGTTCTCC TGCCAAATGA CCCTAGACCC  2340
      TCTGTCCTGC AGAGTCAGGG TGGCTTTTCC CCTGACTGTG TCCGATGCCA AGGAGTCCTG  2400
      GCCTCCGCAG ATGCTTCATT TTGACCCTTG GCTGCAGTGG AAGTCAGCAC AGAGCAGTGC  2460
      CCTGGCTGTG TCCTGGACGG GTGGACTTAG CTAGGGAGAA AGTCGAGGCA GCAGCCCTCG  2520
      AGGCCCTCAC AGATGTCTAG GCAGGCCTCA TTTCATCACG CAGCATGTGC AGGCCTGGAA  2580
      GAGCAAAGCC AAATCTCAGG GAAGTCCTTG GTTGATGTAT CTGGGTCTCC TCTGGAGCAC  2640
      TCTGCCCTCC TGTCACCCAG TAGAGTAAAT AAACTTCCTT GGCTCCTAAA AAA         2693


      Seq ID NO: C72 DNA Sequence
      Nucleic Acid Accession #: NM_004938.1
      Coding sequence: 337..4632


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      CTCCCTAGCT GTGTTCCCGC CGCCGCCCCG GCTAGTCTCC GGCGCTGGCG CCTATGGTCG   180
      GCCTCCGACA GCGCTCCGGA GGGACCGGGG GAGCTCCCAG GCGCCCGGGA CTGGAGACTG   240
      ATGCATGAGG GGCCTACGGA GGCGCAGGAG CGGTGGTGAT GGTCTGGGAA GCGGAGCTGA   300
      AGTCCCCTGG GCTTTGGTGA GGCGTGACAG TTTATCATGA CCGTGTTCAG GCAGGAAAAC   360
      GTGGATGATT ACTACGACAC CGGCGAGGAA CTTGGCAGTG GACAGTTTGC GGTTGTGAAG   420
      AAATGCCGTG AGAAAAGTAC CGGCCTCCAG TATGCCGCCA AATTCATCAA GAAAAGGAGG   480
      ACTAAGTCCA GCCGGCGGGG TGTGAGCCGC GAGGACATCG AGCGGGAGGT CAGCATCCTG   540
      AAGGAGATCC AGCACCCCAA TGTCATCACC CTGCACGAGG TCTATGAGAA CAAGACGGAC   600
      GTCATCCTGA TCTTGGAACT CGTTGCAGGT GGCGAGCTGT TTGACTTCTT AGCTGAAAAG   660
      GAATCTTTAA CTGAAGAGGA AGCAACTGAA TTTCTCAAAC AAATTCTTAA TGGTGTTTAC   720
      TACCTGCACT CCCTTCAAAT CGCCCACTTT GATCTTAAGC CTGAGAACAT AATGCTTTTG   780
      GATAGAAATG TCCCCAAACC TCGGATCAAG ATCATTGACT TTGGGTTGGC CCATAAAATT   840
      GACTTTGGAA ATGAATTTAA AAACATATTT GGGACTCCAG AGTTTGTCGC TCCTGAGATA   900
      GTCAACTATG AACCTCTTGG TCTTGAGGCA GATATGTGGA GTATCGGGGT AATAACCTAT   960
      ATCCTCCTAA GTGGGGCCTC CCCATTTCTT GGAGACACTA AGCAAGAAAC GTTAGCAAAT  1020
      GTATCCGCTG TCAACTACGA ATTTGAGGAT GAATACTTCA GTAATACCAG TGCCCTAGCC  1080
      AAAGATTTCA TAAGAAGACT TCTGGTCAAG GATCCAAAGA AGAGAATGAC AATTCAAGAT  1140
      AGTTTGCAGC ATCCCTGGAT CAAGCCTAAA GATACACAAC AGGCACTTAG TAGAAAAGCA  1200
      TCAGCAGTAA ACATGGAGAA ATTCAAGAAG TTTGCAGCCC GGAAAAAATG GAAACAATCC  1260
      GTTCGCTTGA TATCACTGTG CCAAAGATTA TCCAGGTCAT TCCTGTCCAG AAGTAACATG  1320
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      AACTATGATG TTAACCAACC CAACAAGCAC GGGACACCTC CATTACTCAT TGCTGCTGGC  1500
      TGTGGGAATA TTCAAATACT ACAGTTGCTC ATTAAAAGAG GCTCGAGAAT CGATGTCCAG  1560
      GATAAGGGCG GGTCCAATGC CGTCTACTGG GCTGCTCGGC ATGGCCACGT CGATACCTTG  1620
      AAATTTCTCA GTGAGAACAA ATGCCCTTTG GATGTGAAAG AAGGTCTGG AGAGATGGCC  1680
      CTCCACGTGG CAGCTCGCTA TGGCCATGCT GACGTGGCTC AAGTTACTTG TGCAGCTTCG  1740
      GCTCAAATCC CAATATCCAG GACAAAGGAA GAAGAAACCC CCCTGCACTG TGCTGCTTGG  1800
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      AACCGAGAAG GAGAGACGCC CCTCCTGACA GCCTCTGCCA GGGGCTACCA CGACATCGTG  1920
      GAGTGTCTGG CCGAACATGG AGCCGACCTT AATGCTTGCG ACAAGGACGG ACACATTGCC  1980
      CTTCATCTGG CTGTAAGACG GTGTCAGATG GAGGTAATCA AGACTCTCCT CAGCCAAGGG  2040
      TGTTTCGTCG ATTATCAAGA CAGGCACGGC AATACTCCCC TCCATGTGGC ATGTAAAGAT  2100
      GGCAACATGC CTATCGTGGT GGCCCTCTGT GAAGCAAACT GCAATTTGGA CATCTCCAAC  2160
      AAGTATGGGC GAACGCCTCT GCACCTTGCG GCCAACAACG GAATCCTAGA CGTGGTCCGG  2220
      TATCTCTGTC TGATGGGAGC CAGCGTTGAG GCGCTGACCA CGGACGGAAA GACGGCAGAA  2280
      GATCTTGCTA GATCGGAACA GCACGAGCAC GTAGCAGGTC TCCTTGCAAG ACTTCGAAAG  2340
      GATACGACACC GAGGACTCTT CATCCAGCAG CTCCGACCCA CCACCCTTGT AGAATCTCTC  2400
      ATTAAGCTCA AGCTGTTTGG CCACTCGGGA TCCGGGAAAA CCACCCTTGT AGAATCTCTC  2460
      AAGTGTGGGC TGCTGAGGAG CTTTTTCAGA AGGCGTCGGC CCAGACTGTC TTCCACCAAC  2520
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     TCCAGCAGGT TCCCACCTTC ACCCCTGGCT TCTAAGCCCA CAGTCTCAGT GAGCATCAAC   2580
     AACCTGTACC CAGGCTGCGA GAACGTGAGT GTGAGGAGCC GCAGCATGAT GTTCGAGCCG   2640
     GGTCTTACCA AAGGGATGCT GGAGGTGTTT GTGGCCCCGA CCCACCACCC GCACTGCTCG   2700
     GCCGATGACC AGTCCACCAA GGGCCATCGAC ATCCAGAACG CTTATTTGAA TGGAGTTGGC   2760
     GATTTCAGCG TGTGGGAGTT CTCTGGAAAT CCTGTGTATT TCTGCTGTTA TGACTATTTT   2820
     GCTGCAAATG ATCCCACGTC AATCCATGTT GTTGTCTTTA GTCTAGAAGA GCCCTATGAG   2880
     ATCCAGCTGA ACCCAGTGAT TTTCTGGCTC AGTTTCCTGA AGTCCCTTGT CCCAGTTGAA   2940
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     CTGCAAGAAA TACGAAGCCA GATTGTTTCG GTCTGTCCTC CCATGACTCA CCTGTGTGAG   3240
     AAAATCATCT CCACGCTGCC TTCCTGGAGG AAGCTCAATG GACCCAACCA GCTGATGTCG   3300
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     CTCAGGCGCA TTGCTCAGCA GCTCCACAGC ACAGGCGAGA TCAACATCAT GCAAAGTGAA   3420
     ACAGTTCAGG ACGTGCTGCT CCTGGACCCG CGCTGGCTCT GCACAAACGT CCTGGGGAAG   3480
     TTGCTGTCCG TGGAGACCCA ACGGGCGCTG CACCACTACC GGGGCCGCTA CACCGTGGGA   3540
     GACATCCAGC GCCTGGTGCC CGACAGCGAC GTGGAGGAGC TGCTGCAGAT CCTCGATGCC   3600
     ATGGACATCT GCGCCCGGGA CCTGAGCAGC GGGACCATGG TGGACGTCCC AGCCCTGATC   3660
     AAGACAGACA ACCTGCACCG CTCCTGGGCT GATGAGGAGG ACGAGGTGAT GGTGTATGGT   3720
     GGCGTGCGCA TCGTGCCCGT GGAAACACCTC ACCCCCTTCC CATGTGGCAT CTTTCACAAG   3780
     GTCCAGGTGA ACCTGTGCCA GTGGATCCAC CAGCAAAGCA CAGAGGGCGA CGCGGACATC   3840
     CGCCTGTGGG TGAATGGCTG CAAGCTGGCC AACCGTGGGG CCGAGCTGCT GGTGCTGCTG   3900
     GTCAACCACG GCCAGGGCAT TGAGGTCCAG GTCCGTGGCC TGGAGACGGA GAAGATCAAG   3960
     TGCTGCCTGC TGCTGGACTC GGTGTGCAGC ACCATTGAGA ACGTCATGGC CACCACGCTG   4020
     CCAGGGCTCC TGACCGTGAA GCATTACCTG AGCCCCCAGC AGCTGCGGGA GCACCATGAG   4080
     CCCGTCATGA TCTACCAGCA ACGGGACTTC TTCCGGGCAC AGACTCGTAA GGAAACCTCA   4140
     CTGACCAACA CCATGGGGGG GTACAAGGAA AGCTTCAGCA GCATCATGTG CTTCGGGTGT   4200
     CACGACGTCT ACTCACAGGC CAGCCTCGGC ATGGACATCC ATGCATCAGA CCTGAACCTC   4260
     CTCACTCGGA GGAAACTGAG TCGCCTGCTG GACCCGCCCG ACCCCCTGGG GAAGGACTGG   4320
     TGCCTTCTCG CCATGAACTT AGGCCTCCCT GACCTCGTGG CAAAGTACAA CACCAATAAC   4380
     GGGGCTCCCA AGGATTTCCT CCCCAGCCCC CTCCACGCCC TGCTGCGGGA ATGGACCACT   4440
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     CTTTGGCCGC TTGAAAAGCT AGTGTACCTC CTCTCAGTGT TTTGGACTGC ATCTCTCATC   4920
     CTCCAGTACC TTGCTTCTTA CTGATAATTT TGCTGGAATT CCTAACTTTT CAATGACATT   4980
     TTTTTTAACT ATCATATTGA TTGTCCTTTA AAAAAGAAAA GTGCATATTT ATCCAAAATG   5040
     TGTATTTCTT ATACGCTTTT CTGTGTTATA CCATTTCCTC AGCTTATCTC TTTTTATATTT  5100
     GTAGGAGAAA CTCCCATGTA TGGAATCCCA CTGTATGATT TATAAACAGA CAATATGTGA   5160
     GTGCCTTTTG CAGAAGAGGG TGTGTTTGAA ATCATCGGAG TCAGCCAGGA GCTGTCACCA   5220
     AGGAAACGCT ACCTCTCTGT CCCTTGCTGT ATGCTGATCA TCGCCAGAGG TGCTTCACCC   5280
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     ACCTATGTAA GAATTCAGAA GACCCCTGAC TCATCATTTG TGGCAGTCCC TTATAATTGG   5580
     TGCATAGCAG ATGGTTTCCA CATTTAGATC CTGGTTTCAT AACTTCCTGT ACTTGAAGTC   5640
     TAAAAGCAGA AAATAAAGGA AGCAAGTTTT CTTCCATGAT TTTAAATTGT GATCGAGTTT   5700
     TAAATTGATA GGAGGGAACA TGTCCTAATT CTTCTGTCCT GAGAAGCATG TAATGTTAAT   5760
     GTTATATCAT ATGTATATAT ATATATGCAC TATGTATATA CATATATATT AATACTGGTA   5820
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     TAAACTGTTG CTCGTTAAAA AAAAAAAAAA                                    5910
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Seq ID NO: C73 DNA Sequence
Nucleic Acid Accession #: NM_002081.1
Coding sequence: 222..1898

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     CGGGACCTTG GCTCTGCCCT TCGCGGGCGG GAACTGCGCA GGACCCGGCC AGGATCCGAG   180
     AGAGGCGCGG GCGGGTGGCC GGGGGCGCCG CCGGCCCCGC CATCGAGCTC CGGGCCCGAG   240
     GCTGGTGGCT GCTATGTGCG GCCGCAGCGC TGGTCGCCTG CGCCCGCGGG GACCCCGGCCA  300
     GCAAGAGCCG GAGCTGCGGC GAGGTCCGCC AGATCTACGG AGCCAAGGGC TTCAGCCTGA   360
     GCGACGTGCC CCAGGCGGAG ATCTCGGGTG AGCACCTGCG GATCGTCCC CAGGGCTACA    420
     CCTGCTGCAC CAGCGAGATG GAGGAGAACC TGGCCAACCG CAGCCATGCC GAGCTGGAGA   480
     CCGCGCTCCG GGACAGCAGC CGCGTCCTGC AGGCCATGCT TGCCACCCAG CTGCGCAGCT   540
     TCGATGACCA CTTCCAGCAC CTGCTGAACG ACTCGGAGCG GACGCTGCAG GCCACCTTCC   600
     CCGGCGCCTT CGGAGAGCTG TACACGCAGA ACGCGAGGGC CTTCCGGGAC CTGTACTCAG   660
     AGCTGCGCCT GTACTACCGC GGTGCCAACC TGCACCTGGA GGAGACGCTG GCCGAGTTCT   720
     GGGCCCGCCT GCTCGAGCGG CTCTTCAAGC AGCTGCACCC CCAGCTGCTG CTGCCTGATG   780
     ACTACCTGGA CTGCCTGGGC AAGCAGGCCG AGGCGCTGCG GCCCTTCGGG GAGGCCCCGA   840
     GAGAGCTGCG CCTGCGGGCC ACCCGTGCCT TCGTGGCTGC TCGCTCCTTT GTGCAGGGCC   900
     TGGGCGTGGC CAGCGACGTG GTCCGGAAAG TGGCTCAGGT CCCCCTGGGC CCGGAGTGCT   960
     CGAGAGCTGT CATGAAGCTG GTCTACTGTG CTCACTGCCT GGGAGTCCCC GGCGCCAGGC   1020
     CCTGCCCTGA CTATTGCCGA AATGTGCTCA AGGGCTGCCT TGCCAACCAG GCCGACCTGG   1080
     ACGCCGAGTG GAGGAACCTC CTGGACTCCA TGGTGCTCAT CACCGACAAG TTCTGGGGTA   1140
     CATCGGGTGT GGAGAGTGTC ATCGGCAGCG TGCACACGTG GCTGGCGGAG GCCATCAACG   1200
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      CCCTCCAGGA CAACAGGGAC ACGCTCACGG CCAAGGTCAT CCAGGGCTGC GGGAACCCCA   1260
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      GGGAGAGGCC ACCTTCAGGC ACGCTGGAGA AGCTGGTCTC TGAAGCCAAG GCCCAGCTCC   1380
      GCGACGTCCA GGACTTCTGG ATCAGCCTCC CAGGGACACT GTGCAGTGAG AAGATGGCCC   1440
      TGAGCACTGC CAGTGATGAC CGCTGCTGGA ACGGGATGGC CAGAGGCCGG TACCTCCCCG   1500
      AGGTCATGGG TGACGGCCTG GCCAACCAGA TCAACAACCC CGAGGTGGAG GTGGACATCA   1560
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      GCTCCAGCTC CCGGACGCCC TTGACCCATG CCCTCCCAGG CCTGTCAGAG CAGGAAGGAC   1800
      AGAAGACCTC GGCTGCCAGC TGCCCCCAGC CCCGGACCTT CCTCCTGCCC CTCCTCCTCT   1860
      TCCTGGCCCT TACAGTAGCC AGGCCCCGGT GGCGGTAACT GCCCCAAGGC CCCAGGGACA   1920
      GAGGCCAAGG ACTGACTTTG CCAAAAATAC AACACAGACG ATATTTAATT CACCTCAGCC   1980
      TGGAGAGGCC TGGGGTGGGA CAGGGAGGGC CGGCGGCTCT GAGCAGGGGC AGGCGCAGAG   2040
      GTCCCAGCCC CAGGCCTGGC CTCGCCTGCC TTTCTGCCTT TTAATTTTGT ATGAGGTCCT   2100
      CAGGTCAGCT GGGAGCCAGT GTGCCCAAAA GCCATGTATT TCAGGGACCT CAGGGGCACC   2160
      TCCGGCTGCC TAGCCCTCCC CCCAGCTCCC TGCACCGCCG CAGAAGCAGC CCCTCGAGGC   2220
      CTACAGAGGA GGCCTCAAAG CAACCCGCTG GAGCCCACAG CGAGCCTGTG CCTTCCTCCC   2280
      CGCCTCCTCC CACTGGGACT CCCAGCAGAG CCCACCAGCC AGCCCTGGCC CACCCCCCAG   2340
      CCTCCAGAGA AGCCCCGCAC GGGCTGTCTG GGTGTCCGCC ATCCAGGGTC TGGCAGAGCC   2400
      TCTGAGATGA TGCATGATGC CCTCCCCTCA GCGCAGGCTG CAGAGCCCGG CCCCACCTCC   2460
      CTGCGCCCTT GAGGGGCCCC AGCGTCTGCA GGGTGACGCC TGAGACAGCA CCACTGCTGA   2520
      GGAGTCTGAG GACTGTCCTC CCACAGACCC TGCAGTGAGG GGCCCTCCAT GCGCAGATGA   2580
      GGGGCCACTG ACCCACCTGC GCTTCTGCTG GAGGAGGGGA AGCTGGGCCC AAAGGCCCAG   2640
      GGAGGCAGCG TGGGCTCTGC CAATGTGGGC TGCCCCTCGC ACACAGGGCT CACAGGGCAG   2700
      GCCTTGCTGG GGTCCAGGGC TGTTGGAGGA CCCCGAGGGC TGAGGAGCAG CCAGGACCCG   2760
      CCTGCTCCCA TCCTCACCCA GATCAGGAAC CAGGGCCTCC CTGTTCACGG TGACACAGGT   2820
      CAGGGCTCAG AGTGACCCTC GGCTGTCACC TGCTCACAGG GATGCTGGTG GCTGGTGAGA   2880
      CCCCGCACTG CACACGGGAA TGCCTAGGTC CCTTCCCGAC CCAGCCAGCT GCACTGCAGG   2940
      GCACGGGGAC CTGGATAGTT AAGGGCTTTT CCAAACATGC ATCCATTTAC TGACACTTCC   3000
      TGTCCTTGTT CATGGAGAGC TGTTCGCTCC TCCCAGATGG CTTCGGAGGC CCGCAGGGCC   3060
      CACCTTGGAC CCTGGTGACC TCCTGTCACT CACTGAGGCC ATCAGGGCCG TGCCCCAGGC   3120
      CTGGACGGGC CCTCCTTCCC TCCTGTGCCC CAGCTGCCAG GTGCCCTGG GGAGGGGTGG    3180
      TGTGGTGTTG GGAAGGGGTC CTGCAGGGGG AGGAGGACTT GGAGGGTCTG GGGGCAGCTG   3240
      TCCTGAACCG ACTGACCCTG AGGAGGCCGC TTAGTGCTGC TTTAGTGCTG ATCACCGTCC   3300
      CGCACAGTGA ACGGAGGTCC CCGGTTGCTG GTCAGGTCCC CATGGCTTGT TCTCTGGAAC   3360
      CTGACTTTAG ATGTTTTGGG ATCAGGAGCC CCCAACACAG GCAAGTCCAC CCCATAATAA   3420
      CCCTGCCAGT GCCAGGGTGG GCTGGGGACT CTGGCACAGT GATGCCGGGC GCCAGGACAG   3480
      CAGCACTCCC GCTGCACACA GACGGCCTAG GGGTGGCGCT CAGACCCCAC CCTACGCTCA   3540
      TCTCTGGAAG GGGCAGCCCT GAGTGGTCAC TGGTCAGGGC AGTGGCCAAG CCTGCTGTGT   3600
      CCTTCCTCCA CAAGGTCCCC CCACCGCTCA GTGTCAGCGG GTGACGTGTG TTCTTTTGAG   3660
      TCCTTGTATG AATAAAAGGC TGGAAACCTA AA                                 3692
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Seq ID NO: C74 DNA Sequence
Nucleic Acid Accession #: BC030205.1
Coding sequence: 45..878

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ATAACTCCAT ATGGCTTGAA CGAGCAGCCG GTGTGTACCA CAGAGAAGCA CGGTCTGGCA   180
AATACAAGCT CACCTACGCA GAAGCTAAGG CGGTGTGTGA ATTTGAAGGC GGCCATCTCG   240
CAACTTACAA GCAGCTAGAG GCAGCCAGAA AAATTGGATT TCATGTCTGT GCTGCTGGAT   300
GGATGGCTAA GGGCAGAGTT GGATACCCCA TTGTGAAGCC AGGGCCCAAC TGTGGATTTG   360
GAAAAACTGG CATTATTGAT TATGGAATCC GTCTCAATAG GAGTGAAAGA TGGGATGCCT   420
ATTGCTACAA CCCACACGCA AAGGAGTGTG GTGGCGTCTT TACAGATCCA AAGCAAATTT   480
TTAAATCTCC AGGCTTCCCA AATGAGTACG AAGATAACCA AATCTGCTAC TGGCACATTA   540
GACTCAAGTA TGGTCAGCGT ATTCACCTGA GTTTTTTAGA TTTTGACCTT GAAGATGACC   600
CAGGTTGCTT GGCTGATTAT GTTGAAATAT ATGACAGTTA CGATGATGTC CATGGCTTTG   660
TGGGAAGATA CTGTGGAGAT GAGCTTCCAG ATGACATCAT CAGTACAGGA AATGTCATGA   720
CCTTGAAGTT TCTAAGTGAT GCTTCAGTGA CAGCTGGAGG TTTCCAAATC AAATATGTTG   780
CAATGGATCC TGTATCCAAA TCCAGTCAAG GAAAAAATAC AAGTACTACT TCTACTGGAA   840
ATAAAAACTT TTTAGCTGGA AGATTTAGCC ACTTATAAAA AAAAAAAAG GATGATCAAA    900
ACACACAGTG TTTATGTTGG AATCTTTTGG AACTCCTTTG ATCTCACTGT TATTATTAAC   960
ATTTATTTAT TATTTTTCTA AATGTGAAAG CAATACATAA TTTAGGGAAA ATTGGAAAAT   1020
ATAGGAAACT TTAAACGAGA AAATGAAACC TCTCATAATC CCACTGCATA GAAATAACAA   1080
GCGTTAACAT TTTCATATTT TTTTCTTTCA GTCATTTTTC TATTTGTGGT ATATGTATAT   1140
ATGTACCTAT ATGTATTTGC ATTTGAAATT TTGGAATCCT GCTCTATGTA CAGTTTTGTA   1200
TTATACTTTT TAAATCTTGA ACTTTATAAA CATTTTCTGA AATCATTGAT TATTCTACAA   1260
AAACATGATT TTAAACAGCT GTAAAATATT CTATGATATG AATGTTTTAT GCATTATTTA   1320
AGCCTGTCTC TATTGTTGGA ATTTCAGGTC ATTTTCATAA ATATTGTTGC AATAAATATC   1380
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Seq ID NO: C75 DNA Sequence
Nucleic Acid Accession #: NM_001982.1
Coding sequence: 199..4227

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TTGCAATTTG CAACCTCCGC TGCCGTCGCC GCAGCAGCCA CCAATTCGCC AGCGGTTCAG   120
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      GTGGCTCTTG CCTCGATGTC CTAGCCTAGG GGCCCCCGGG CCGGACTTGG CTGGGCTCCC   180
      TTCACCCTCT GCGGAGTCAT GAGGGCGAAC GACGCTCTGC AGGTGCTGGG CTTGCTTTTC   240
      AGCCTGGCCC GGGGCTCCGA GGTGGGCAAC TCTCAGGCAG TGTGTCCTGG GACTCTGAAT   300
      GGCCTGAGTG TGACCGGCGA TGCTGAGAAC CAATACCAGA CACTGTACAA GCTCTACGAG   360
  5   AGGTGTGAGG TGGTGATGGG GAACCTTGAG ATTGTGCTCA CGGGACACAA TGCCGACCTC   420
      TCCTTCCTGC AGTGGATTCG AGAAGTGACA GGCTATGTCC TCGTGGCCAT GAATGAATTC   480
      TCTACTCTAC CATTGCCCAA CCTCCGCGTG GTGCGAGGGA CCCAGGTCTA CGATGGGAAG   540
      TTTGCCATCT TCGTCATGTT GAACTATAAC ACCAACTCCA GCCACGCTCT GCGCCAGCTC   600
      CGCTTGACTC AGCTCACCGA GATTCTGTCA GGGGGTGTTT ATATTGAGAA GAACGATAAG   660
 10   CTTTGTCACA TGGACACAAT TGACTGGAGG GACATCGTGA GGGACCGAGA TGCTGAGATA   720
      GTGGTGAAGG ACAATGGCAG AAGCTGTCCC CCTGTCATG AGGTTTGCAA GGGGCGATGC   780
      TGGGGTCCTG GATCAGAAGA CTGCCAGACA TTGACCAAGA CCATCTGTGC TCCTCAGTGT   840
      AATGGTCACT GCTTTGGGCC CAACCCCAAC CAGTGCTGCC ATGATGAGTG TGCCGGGGGC   900
      TGCTCAGGCC CTCAGGACAC AGACTGCTTT GCCTGCCGGC ACTTCAATGA CAGTGGAGCC   960
 15   TGTGTACCTC GCTGTCCACA GCCTCTTGTC TACAACAAGC TAACTTTCCA GCTGGAACCC  1020
      AATCCCCACA CCAAGTATCA GTATGGAGGA GTTTGTGTAG CCAGCTGTCC CCATAACTTT  1080
      GTGGTGGATC AAACATCCTG TGTCAGGGCC TGTCCTCCTG ACAAGATGGA AGTAGATAAA  1140
      AATGGGCTCA AGATGTGTGA GCCTTGTGGG GGACTATGTC CCAAAGCCTG TGAGGGAACA  1200
      GGCTCTGGGA GCCGCTTCCA GACTGTGGAC TCGAGCAACA TTGATGGATT TGTGAACTGC  1260
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      AAGATCCCTG CCCTGGACCC AGAGAAGCTC AATGTCTTCC GGACAGTACG GGAGATCACA  1380
      GGTTACCTGA ACATCCAGTC CTGGCCGCCA CACATGCACA ACTTCAGTGT TTTTTCCAAT  1440
      TTGACAACCA TTGGAGGCAG AAGCCTCTAC AACCGGGGCT TCTCATTGTT GATCATGAAG  1500
      AACTTGAATG TCACATCTCT GGGCTTCCGA TCCCTGAAGG AAATTAGTGC TGGGCGTATC  1560
 25   TATATAAGTG CCAATAGGCA GCTCTGCTAC CACCACTCTT TGAACTGGAC CAAGGTGCTT  1620
      CGGGGGCCTA CGGAAGAGCG ACTAGACATC AAGCATAATC GGCCGCGCAG AGACTGCGTG  1680
      GCAGAGGGCA AAGTGTGTGA CCCACTGTGC TCCTCTGGGG GATGCTGGGG CCCAGGCCCT  1740
      GGTCAGTGCT TGTCCTGTCG AAATTATAGC CGAGGAGGTG TCTGTGTGAC CCACTGCAAC  1800
      TTTCTGAATG GGGAGCCTCG AGAATTTGCC CATGAGGCCG AATGCTTCTC CTGCCACCCG  1860
 30   GAATGCCAAC CCATGGGGGG CACTGCCACA TGCAATGGCT CGGGCTCTGA TACTTGTGCT  1920
      CAATGTGCCC ATTTTCGAGA TGGGCCCCAC TGTGTGAGCA GCTGCCCCCA TGGAGTCCTA  1980
      GGTGCCAAGG GCCCAATCTA CAAGTACCCA GATGTTCAGA ATGAATGTCG GCCCTGCCAT  2040
      GAGAACTGCA CCCAGGGGTG TAAAGGACCA GAGCTTCAAG ACTGTTTAGG ACAAACACTG  2100
      GTGCTGATCG GCAAAACCCA TCTGACAATG GCTTTGACAG TGATAGCAGG ATTGGTAGTG  2160
 35   ATTTTCATGA TGCTGGGCGG CACTTTTCTC TACTGGCGTG GGCGCCGGAT TCAGAATAAA  2220
      AGGGCTATGA GGCGATACTT GGAACGGGGT GAGAGCATAG AGCCTCTGGA CCCCAGTGAG  2280
      AAGGCTAACA AAGTCTTGGC CAGAATCTTC AAAGAGACAG AGCTAAGGAA GCTTAAAGTG  2340
      CTTGGCTCGG GTGTCTTTGG AACTGTGCAC AAAGGAGTGT GGATCCCTGA GGGTGAATCA  2400
      ATCAAGATTC CAGTCTGCAT TAAAGTCATT GAGGACAAGA GTGGACGGCA GAGTTTTCAA  2460
 40   GCTGTGACAG ATCATATGCT GGCCATTGGC AGCCTGGACC ATGCCCACAT TGTAAGGCTG  2520
      CTGGGACTAT GCCCAGGGTC ATCTCTGCAG CTTGTCACTC AATATTTGCC TCTGGGTTCT  2580
      CTGCTGATCC ATGTGAGACA ACACCGGGGG GCACTGGGGC CACAGCTGCT GCTCAACTGG  2640
      GGAGTACAAA TTGCCAAGGG AATGTACTAC CTTGAGGAAC ATGGTATGGT GCATAGAAAC  2700
      CTGGCTGCCC GAAAACGTGCT ACTCAAGTCA CCCAGTCAGG TTCAGGTGGC AGATTTTGGT  2760
 45   GTGGCTGACC TGCTGCCTCC TGATGATAAG CAGCTGCTAT ACAGTGAGGC CAAGACTCCA  2820
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      CTACGATTGG CTGAAGTACC AGACCTGCTA GAGAAGGGGG AGCGGTTGGC ACAGCCCCAG  3000
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      CTGACAAACA AGAAGCTAGA GGAAGTAGAG CTGGAGCCAG AACTAGACCT AGACCTAGAC  3240
      TTGGAAGCAG AGGAGGACAA CCTGCCAACC ACCACACTGG GCTCCGCCCT CAGCCTACCA  3300
      GTTGGAACAC TTAATCGGCC ACGTGGGAGC CAGAGCCTTT TAAGTCCATC ATCTGGATAC  3360
 55   ATGCCCATGA ACCAGGGTAA TCTTGGGGGG TCTTGCCAGG AGTCTGCAGT TTCTGGGAGC  3420
      AGTGAACGGT GCCCCCGTCC AGTCTCTCTA CACCCAATGC CACGGGGATG CCTGGCATCA  3480
      GAGTCATCAG AGGGGCATGT AACAGGCTCT GAGGCTGAGC TCCAGGAGAA AGTGTCAATG  3540
      TGTAGAAGCC GGAGCAGGAG CCGGAGCCCA CGGCCACGCG GAGATAGCGC CTACCATTCC  3600
      CAGCGCCACA GTCTGCTGAC TCCTGTTACC CCACTCTCCC CACCCGGGTT AGAGGAAGAG  3660
 60   GATGTCAACG GTTATGTCAT GCCAGATACA CACCTCAAAG GTACTCCCTC CTCCCGGGAA  3720
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      GAGGAGTATG AATACATGAA CCGGAGGGAG AGGCACAGTC CACCTCATCC CCCTAGGCCA  3840
      AGTTCCCTTG AGGAGCTGGG TTATGAGTAC ATGGATGTGG GGTCAGACCT CAGTGCCTCT  3900
      CTGGGCAGCA CACAGAGTTG CCCACTCCAC CCTGTACCCA TCATGCCCAC TGCAGGCACA  3960
 65   ACTCCAGATG AAGACTATGA ATATATGAAT CGGCAACGAG ATGGAGGTGG TCCTGGGGGT  4020
      GATTATGCAG CCATGGGGGC CTGCCCAGCA TCTGAGCAAG GGTATGAAGA GATGAGAGCT  4080
      TTTCAGGGGC CTGGACATCA GGCCCCCCAT GTCCATTATG CCCGCCTAAA AACTCTACGT  4140
      AGCTTAGAGG CTACAGACTC TGCCTTTGAT AACCCTGATT ACTGGCATAG CAGGCTTTTC  4200
      CCCAAGGCTA ATGCCCAGAG AACGTAACTC CTGCTCCCTG TGGCACTCAG GGAGCATTTA  4260
 70   ATGGCAGCTA GTGCCTTTAG AGGGTACCGT CTTCTCCCTA TTCCCTCTCT CTCCCAGGTC  4320
      CCAGCCCCTT TTCCCCAGTC CCAGACAATT CCATTCAATC TTTGGAGGCT TTTAAACATT  4380
      TTGACACAAA ATTCTTATGG TATGTAGCCA GCTGTGCACT TTCTTCTCTT TCCCAACCCC  4440
      AGGAAAGGTT TTCCTTATTT TGTGTGCTTT CCCAGTCCCA TTCCTCAGCT TCTTCACAGG  4500
      CACTCCTGGA GATATGAAGG ATTACTCTCC ATATCCCTTC CTCTCAGGCT CTTGACTACT  4560
 75   TGGAACTAGG CTCTTATGTG TGCCTTTGTT TCCCATCAGA CTGTCAAGAA GAGGAAGGG  4620
      AGGAAACCTA GCAGAGGAAA GTGTAATTTT GGTTTATGAC TCTTAACCCC CTAGAAAGAC  4680
      AGAAGCTTAAC AATCTGTGAA GAAAGAGGTT AGGAGTAGAT ATTGATTACT ATCATAATTC  4740
      AGCACTTAAC TATGAGCCAG GCATCATACT AAACTTCACC TACATTATCT CACTTAGTCC  4800
      TTTATCATCC TTAAAACAAT TCTGTGACAT ACATATTATC TCATTTTACA CAAAGGGAAG  4860
 80   TCGGGCATGG TGGCTCATGC CTGTAATCTC AGCACTTTGG GAGGCTGAGG CAGAAGGATT  4920
      ACCTGAGGCA AGGAGTTTGA GACCAGCTTA GCCAACATAG TAAGACCCCC ATCTC        4975
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      Seq ID NO: C76 DNA Sequence

Nucleic Acid Accession #: NM_001216.1
Coding sequence: 43..1422

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   CTGTCACTGC TGCTTCTGAT GCCTGTCCAT CCCCAGAGGT TGCCCCGGAT GCAGGAGGAT  180
   TCCCCCTTGG GAGGAGGCTC TTCTGGGGAA GATGACCCAC TGGGCGAGGA GGATCTGCCC  240
   AGTGAAGAGG ATTCACCCAG AGAGGAGGAT CCACCCGGAG AGGAGGATCT ACCTGGAGAG  300
   GAGGATCTAC CTGGAGAGGA GGATCTACCT GAAGTTAAGC CTAAATCAGA AGAAGAGGGC  360
   TCCCTGAAGT TAGAGGATCT ACCTACTGTT GAGGCTCCTG GAGATCCTCA AGAACCCCAG  420
   AATAATGCCC ACAGGGACAA AGAAGGGGAT GACCAGAGTC ATTGGCGCTA TGGAGGCGAC  480
   CCGCCCTGGC CCCGGGTGTC CCCAGCCTGC GCGGGCCGCT TCCAGTCCCC GGTGGATATC  540
   CGCCCCCAGC TCGCCGCCTT CTGCCCGGCC CTGCGCCCCC TGGAACTCCT GGGCTTCCAG  600
   CTCCCGCCGC TCCCAGAACT GCGCCTGCGC AACAATGGCC ACAGTGTGCA ACTGACCCTG  660
   CCTCCTGGGC TAGAGATGGC TCTGGGTCCC GGGCGGGAGT ACCGGGCTCT GCAGCTGCAT  720
   CTGCACTGGG GGGCTGCAGG TCGTCCGGGC TCGGAGCACA CTGTGGAAGG CCACCGTTTC  780
   CCTGCCGAGA TCCACGTGGT TCACCTCAGC ACCGCCTTTG CCAGAGTTGA CGAGGCCTTG  840
   GGGCGCCCGG GAGGCCTGGC CGTGTTGGCC GCCTTTCTGG AGGAGGGCCC GGAAGAAAAC  900
   AGTGCCTATG AGCAGTTGCT GTCTCGCTTG GAAGAAATCG CTGAGGAAGG CTCAGAGACT  960
   CAGGTCCCAG GACTGGACAT ATCTGCACTC CTGCCCTCTG ACTTCAGCCG CTACTTCCAA 1020
   TATGAGGGGT CTCTGACTAC ACCGCCCTGT GCCCAGGGTG TCATCTGGAC TGTGTTTAAC 1080
   CAGACAGTGA TGCTGAGTGC TAAGCAGCTC CACACCCTCT CTGACACCCT GTGGGGACCT 1140
   GGTGACTCTC GGCTACAGCT GAACTTCCGA GCGACGCAGC CTTTGAATGG GCGAGTGATT 1200
   GAGGCTCCT TCCCTGCTGG AGTGGACAGC AGTCCTCGGG CTGCTGAGCC AGTCCAGCTG 1260
   AATTCCTGCC TGGCTGCTGG TGACATCCTA GCCCTGGTTT TTGCCTCCTT TTTTGCTGTC 1320
   ACCAGCGTCG CGTTCCTTGT GCAGATGAGA AGGCAGCACA GAAGGGGAAC CAAAGGGGGT 1380
   GTGAGCTACC GCCCAGCAGA GGTAGCCGAG ACTGGAGCCT AGAGGCTGGA TCTTGGAGAA 1440
   TGTGAGAAGC CAGCCGAGG CATCTGAGGG GGAGCCGGTA ACTGTCCTGT CCTGCTCATT 1500
   ATGCCACTTC CTTTTAACTG CCAAGAAATT TTTTAAAATA AATATTTATA AT           1552
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Seq ID NO: C77 DNA Sequence
Nucleic Acid Accession #: NM_004207.1
Coding sequence: 63..1460

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   CCATGGGAGG GGCCGTGGTG GACGAGGGCC CCACAGGCGT CAAGGCCCCT GACGGCGGCT  120
   GGGGCCTGGGC CGTGCTCTTC GGCTGTTTCG TCATCACTGG CTTCTCCTAC GCCTTCCCCA  180
   AGGCCGTCAG TGTCTTCTTC AAGGAGCTCA TACAGGAGTT TGGGATCGGC TACAGCGACA  240
   CAGCCTGGAT CTCCTCCATC CTGCTGGCCA TGCTCTACGG GACAGGTCCG CTCTGCAGTG  300
   TGTGCGTGAA CCGCTTTGGC TGCCGGCCCG TCATGCTTGT GGGGGGTCTC TTTGCGTGC  360
   TGGGCATGGT GGCTGCGTCC TTTTGCCGGA GCATCATCCA GGTCTACCTC ACCACTGGGG  420
   TCATCACGGG GTTGGGTTTG GCACTCAACT TCCAGCCCTC GCTCATCATG CTGAACCGCT  480
   ACTTCAGCAA GCGGCGCCCC ATGGCCAACG GCTGGCGGC AGCAGGTAGC CCTGTCTTCC  540
   TGTGTGCCCT GAGCCCGCTG GGGCAGCTGC TGCAGGACCG CTACGGCTGG CGGGGCGGCT  600
   TCCTCATCCT GGGCGGCCTG CTGCTCAACT GCTGCGTGTG TGCCGCACTC ATGAGGCCCC  660
   TGGTGGTCAC GGCCCAGCCG GGCTCGGGGC CGCCGCGACC CTCCCGGCGC CTGCTAGACC  720
   TGAGCCGTCTT CCGGGACCGC GGCTTTGTGC TTTACGCCGT GTCATGGTGC  780
   TGGGGCTCTT CGTCCCGCCC GTGTTCGTGG TGAGCTACGC CAAGGACCTG GGCGTGCCCG  840
   ACACCAAGGC CGCCTTCCTG CTCACCATCC TGGGCTTCAT TGACATCTTC GCGCGGCCGG  900
   CCGCGGGCTT CGTGGCGGGG CTTGGGAAGG TGCGGCCCTA CTCCGTCTAC CTCTTCAGCT  960
   TCTCCATGTT CTTCAACGGC CTCGCGGACC TGGCGGGCTC TACGGCGGGC GACTACGGCG 1020
   GCCTCGTGGT CTTCTGCATC TTCTTTGGCA TCTCCTACGG CATGGTGGGG GCCCTGCAGT 1080
   TCGAGGTGCT CATGGCCATC GTGGGCACCC ACAAGTTCTC CAGTGCCATT GGCCTGGTGC 1140
   TGCTGATGGA GGCGGTGGCC GTGCTCGTCG GCCCCCCTTC GGGAGGCAAA CTCCTGGATG 1200
   CGACCCACGT CTACATGTAC GTGTTCATCC TGGCGGGGGC CGAGGTGCTC ACCTCCTCCC 1260
   TGATTTTGCT GCTGGGCAAC TTCTTCTGCA TTAGGAAGAA GCCCAAAGAG CCACAGCCTG 1320
   AGGTGGCGGC CGCGGAGGAG GAGAAGCTCC ACAAGCCTCC TGCAGACTCG GGGGTGGACT 1380
   TGCGGGAGGT GGAGCATTTC CTGAAGGCTG AGCCTGAGAA AAACGGGGAG GTGGTTCACA 1440
   CCCCGGAAAC AAGTGTCTGA GTGGCTGGGC GGGGCCGGCA GGCACAGGGA GGAGGTACAG 1500
   AAGCCGGCAA CGCTTGCTAT TTATTTTACA AACTGGACTG GCTCAGGCAG GGCCACGGCT 1560
   GGGCTCCAGC TGCCGGCCCA GCGGATCGTC GCCCGATCAG TGTTTTGAGG GGGAAGGTGG 1620
   CGGGGTGGGA ACCGTGTCAT TCCAGAGTGG ATCTGCGGTG AAGCCAAGCC GCAAGGTTAC 1680
   AAGGCATCCT CACCAGGGGC CCCGCCTGCT GCTCCCAGGT GCCTGCGGC CACTGCTATG 1740
   CTCAAGGACC TGGAAACCCA TGCTTCGAGA CAACGTGACT TTAATGGGAG GGTGGGTGGG 1800
   CCGCAGACAG GCTGGCAGGG CAGGTGCTGC GTGGGGCCCT CTCCAGCCCG TCCTACCCTG 1860
   GGCTCACATG GGGCCTGTGC CCACCCCTCT TGAGTGTCTT GGGGACAGCT CTTTCCACCC 1920
   CTGGAAGATG GAAATAAACC TGCGTGTGGG TGGAGTGTTC TCGTGCCGAA TTCAAAAAGC 1980
   TT                                                                 1982
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Seq ID NO: C78 DNA Sequence
Nucleic Acid Accession #: NM_000358.1
Coding sequence: 48..2099

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      1         11        21        31        41        51
      |         |         |         |         |         |
   GCTTGCCCGT CGGTCGCTAG CTCGCTCGGT GCGCGTCGTC CCGCTCCATG GCGCTCTTCG   60
   TGCGGCTGCT GGCTCTCGCC CTGGCTCTGG CCCTGGGCCC CGCCGCGACC CTGGCGGGTC  120
   CCGCCAAGTC GCCCTACCAG CTGGTGCTGC AGCACAGCAG GCTCCGGGAC CGCCAGCACG  180
   GCCCCAACGT GTGTGCTGTG CAGAAGGTTA TTGGCACTAA TAGGGAAGTAC TTCACCAACT  240
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       GCAAGCAGTG GTACCAAAGG AAAATCTGTG GCAAATCAAC AGTCATCAGC TACGAGTGCT    300
       GTCCTGGATA TGAAAAGGTC CCTGGGGAGA AGGGCTGTCC AGCAGCCCTA CCACTCTCAA    360
       ACCTTTACGA GACCCTGGGA GTCGTTGGAT CCACCACCAC TCAGCTGTAC ACGGACCGGCA    420
       CGGAGAAGCT GAGGCCTGAG ATGGAGGGGC CCGGCAGCTT CACCATCTTC GCCCCTAGCA    480
       ACGAGGCCTG GGCCTCCTTG CCAGCTGAAG TGCTGGACTC CCTGGTCAGC AATGTCAACA    540
       TTGAGCTGCT CAATGCCCTC CGCTACCATA TGGTGGGCAG GCGAGTCCTG ACTGATGAGC    600
       TGAAACACGG CATGACCCTC ACCTCTATGT ACCAGAATTC CAACATCCAG ATCCACCACT    660
       ATCCTAATGG GATTGTAACT GTGAACTGTG CCCGGCTCCT GAAAGCCGAC CACCATGCAA    720
       CCAACGGGGT GGTGCACCTC ATCGATAAGG TCATCTCCAC CATCACCAAC AACATCCAGC    780
       AGATCATTGA GATCGAGGAC ACCTTTGAGA CCCTTCGGGC TGCTGTGGCT GCATCAGGGC    840
       TCAACACGAT GCTTGAAGGT AACGGCCAGT ACACGCTTTT GGCCCCGACC AATGAGGCCT    900
       TCGAGAAGAT CCCTAGTGAG ACTTTGAACC GTATCCTGGG CGACCCAGAA GCCCTGAGAG    960
       ACCTGCTGAA CAACCACATC TTGAAGTCAG CTATGTGTGC TGAAGCCATC GTTGCGGGGC   1020
       TGTCTGTAGA GACCCTGGAG GGCACGCACAC TGGAGGTGGG CTGCAGCGGG GACATGCTCA   1080
       CTATCAACGG GAAGGCGATC ATCTCCAATA AAGACATCCT AGCCACCAAC GGGGTGGATCC   1140
       ACTACATTGA TGAGCTACTC ATCCCAGACT CAGCCAAGAC ACTATTTGAA TTGGCTGCAG   1200
       AGTCTGATGT GTCCACAGCC ATTGACCTTT TCAGACAAGC CGGCCTCGGC AATCATCTCT   1260
       CTGGAAGTGA GCGGTTGACC CTCCTGGCTC CCCTGAATTC TGTATTCAAA GATGGAACCC   1320
       CTCCAATTGA TGCCCATACA AGGAATTTGC TTCGGAACCA CATAATTAAA GACCAGCTGG   1380
       CCTCTAAGTA TCTGTACCAT GGACAGACCC TGGAAACTCT GGGCGGCAAA AAACTGAGAG   1440
       TTTTTGTTTA TCGTAATAGC CTCTGCATTG AGAACAGCTG CATCGCGCC CACGACAAGA    1500
       GGGGGAGGTA CGGGACCCTG TTCACGATGG ACCGGGTGCT GACCCCCCCA ATGGGGACTG   1560
       TCATGGATGT CCTGAAGGGA GACAATCGCT TTAGCATGCT GGTAGCTGCC ATCCAGTCTG   1620
       CAGGACTGAC GGAGACCCTC AACGGGGAAG GAGTCTACAC AGTCTTTGCT CCCACAAATG   1680
       AAGCCTTCCG AGCCCTGCCA CCAAGAGAAC GGAGCAGACT CTTGGGGAGAT GCCAAGGAAC   1740
       TTGCCAACAT CCTGAAATAC CACATTGGTG ATGAAATCCT GGTTAGCGGA GGCATCGGGG   1800
       CCCTGGTGCG GCTAAAGTCT CTCCAAGGTG ACAAGCTGGA AGTCAGCTTG AAAAACAATG   1860
       TGGTGAGTGT CAACAAGGAG CCTGTTGCCG AGCCTGACAT CATGGCCACA AATGGCGTGG   1920
       TCCATGTCAT CACCAATGTT CTGCAGCCTC CAGCCAACAG ACCTCAGGAA AGAGGGGATG   1980
       AACTTGCAGA CTCTGCGCTT GAGATCTTCA AACAAGCATC AGCGTTTTCC AGGGCTTCCC   2040
       AGAGGTCTGT GCGACTAGCC CCTGTCTATC AAAAGTTATT AGAGAGGATG AAGCATTAGC   2100
       TTGAAGCACT ACAGGAGGAA TGCACCACGG CAGCTCTCCG CCAATTTCTC TCAGATTTCC   2160
       ACAGAGACTG TTTGAATGTT TTCAAAACCA AGTATCCACAC TTTAATGTAC ATGGGCCGCA    2220
       CCATAATGAG ATGTGAGCCT TGTGCATGTG GGGGAGGAGG GAGAGAGATG TACTTTTTAA   2280
       ATCATGTTCC CCCTAAACAT GGCTGTTAAC CCACTGCATG CAGAAACTTG GATGTCACTG   2340
       CCTGACATTC ACTTCCAGAG AGGACCTATC CCAAATGTGG AATTGACTGC CTATGCCAAG   2400
       TCCCTGGAAA AGGAGCTTCA GTATTGTGGG GCTCATAAAA CATGAATCAA GCAATCCAGC   2460
       CTCATGGGAA GTCCTGGCAC AGTTTTTGTA AAGCCCTTGC ACAGCTGGAG AAATGGCATC   2520
       ATTATAAGCT ATGAGTTGAA ATGTTCTGTC AAATGTGTCT CACATCTACA CGTTGGCTTGG   2580
       AGGCTTTTAT GGGGCCCTGT CCAGGTAGAA AAGAAATGGT ATGTAGAGCT TAGATTTCCC   2640
       TATTGTGACA GAGCCATGGT GTGTTTGTAA TAATAAAACC AAAGAAACAT A             2691
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Seq ID NO: C79 DNA Sequence
Nucleic Acid Accession #: NM_006536.2
Coding sequence: 109..2940

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       ATGTATGCAG CAGGCTCAGT GTGAGTGAAC TGGAGGCTTC TCTACAACAT GACCCAAAGG   120
       AGCATTGCAG GTCCTATTTG CAACCTGAAG TTTGTGACTC TCCTGGTTGC CTTAAGTTCA   180
       GAACTCCCAT TCCTGGGAGC TGGAGTACAG CTTCAAGACA ATGGGTATAA TGGATTGCTC   240
       ATTGCAATTA ATCCTCAGGT ACCTGAGAAT CAGAACCTCA TCTCAAACAT TAAGGAAATG   300
       ATAACTGAAG CTTCATTTTA CCTATTTAAT GCTACCAAGA GAAGAGTATT TTTCAGAAAT   360
       ATAAAGATTT TAATACCTGC CACATGGAAA GCTAATAATA ACAGCAAAAT AAAACAAGAA   420
       TCATATGAAA AGGCAAATGT CATAGTGACT GACTGGTATG GGGCACATGG AGATGATCCA   480
       TACACCCTAC AATACAGAGG GTGTGGAAAA GAGGGAAAAT ACATTCATTT CACACCTAAT   540
       TTCCTACTGA ATGATAACTT AACAGCTGGC TACGGATCAC GAGGCCGAGT GTTTGTCCAT   600
       GAATGGGCCC ACCTCCGTTG GGGTGTGTTC GATGAGTATA ACAATGACAA ACCTTTCTAC   660
       ATAAATGGGC AAAATCAAAT TAAAGTGACA AGGTGTTCAT CTGACATCAC AGGCATTTTT   720
       GTGTGTGAAA AAGGTCCTTG CCCCCAAGAA AACTGTATTA TTAGTAAGCT TTTTAAAGAA   780
       GGATGCACCT TTATCTACAA TAGCACCCAA AATGCAACTG CATCAATAAT GTTCATGCAA   840
       AGTTTATCTT CTGTGGTTGA ATTTTGTAAT GCAAGTACCC ACAACCAAGA AGCACCCAAC   900
       CTACAGAACC AGATGTGCAG CCTCAGAAGT GCATGGGATG TAATCACAGA CTCTGCTGAC   960
       TTTCACCACA GCTTTCCAT GAATGGGACT GAGCTTCCAC CTCCTCCCAC ATTCTCGCTT   1020
       GTACAGGCTG GTGACAAAGT GGTCTGTTTA GTGCTGGATG TGTCCAGCAA GATGGCCAGAG   1080
       GCTGACAGAC TCCTTCAACT ACAACAAGCC GCAGAATTTT ATTTGATGCA GATTGTTGAA   1140
       ATTCATACCT TCGTGGGCAT TGCCAGTTTC GACAGCAAAG GAGAGATCAG AGCCCAGCTA   1200
       CACCAAATTA ACAGCAATGA TGATCGAAAG TTGCTGGTTT CATATCTGCC CACCACTGTA   1260
       TCAGCTAAAA CAGACATCAG CATTTGTTCA GGGCTTAAGA AAGGATTTGA GGTGGTTGAA   1320
       AAACTGAATG GAAAAGCTTA TGGCTCTGTG ATGATATTAG TGACCAGCGG AGATGATAAG   1380
       CTTCTTGGCA ATTGCTTACC CACTGTGCTC AGCAGTGGTT CAACAATTCA CTCCATTGCC   1440
       CTGGGTTCAT CTGCAGCCCC AAATCTGGAG GAATTATCAC GTCTTACAGG AGGTTTAAAG   1500
       TTCTTTGTTC CAGATATATC AAACTCCAAT AGCATGATTG ATGCTTTCAG TAGAATTTCC   1560
       TCTGGAACTG GAGACATTTT CCAGCAACAT ATTCAGCTTG AAAGTACAGG TGAAAATGTC   1620
       AAACCTCACC ATCAATTGAA AAACACAGTG ACTGTGGATA ATACTGTGGG CAACGACACT   1680
       ATGTTTCTAG TTACGTGGCA GGCCAGTGGT CCTCCTGAGA TTATATTATT TGATCCTGAT   1740
       GGACGAAAAT ACTACACAAA TAATTTTATC ACCAATCTAA CTTTTCGGAC AGCTAGTCTT   1800
       TGGATTCCAG GAACAGCTAA GCCTGGGCAC TGGACTTACA CCCTGAACAA TACCCATCAT   1860
       TCTCTGCAAG CCCTGAAAGT GACAGTGACC CTCTCGCGCCT CCAACTCAGC TGTGCCCCCA   1920
       GCCACTGTGG AAGCCTTTGT GGAAAGAGAC AGCCTCCATT TTCCTCATCC TGTGATGATT   1980
       TATGCCAATG TGAAACAGGG ATTTTATCCC ATTCTTAATG CCACTGTCAC TGCCACAGTT   2040
       GAGCCAGAGA CTGGAGATCC TGTTACGCTG AGACTCCTTG ATGATGGAGC AGGTGCTGAT   2100
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GTTATAAAAA ATGATGGAAT TTACTCGAGG TATTTTTTCT CCTTTGCTGC AAATGGTAGA   2160
TATAGCTTGA AAGTGCATGT CAATCACTCT CCCAGCATAA GCACCCCAGC CCACTCTATT   2220
CCAGGGAGTC ATGCTATGTA TGTACCAGGT TACACAGCAA ACGGTAATAT TCAGATGAAT   2280
GCTCCAAGGA AATCAGTAGG CAGAAATGAG GAGGAGCGAA AGTGGGGCTT TAGCCGAGTC   2340
AGCTCAGGAG GCTCCTTTTC AGTGCTGGGA GTTCCAGCTG GCCCCCACCC TGATGTGTTT   2400
CCACCATGCA AAATTATTGA CCTGGAAGCT GTAAAAGTAG AAGAGGAATT GACCCTATCT   2460
TGGACAGCAC CTGGAGAAGA CTTTGATCAG GGCCAGGCTA CAAGCTATGA AATAAGAATG   2520
AGTAAAAGTC TACAGAATAT CCAAGATGAC TTTAACAATG CTATTTTAGT AAATACATCA   2580
AAGCGAAATC CTCAGCAAGC TGGCATCAGG GAGATATTTA CGTTCTCACC CCAGATTTCC   2640
ACGAATGGAC CTGAACATCA GCCAAATGGA GAAACACATG AAAGCCACAG AATTTATGTT   2700
GCAATACGAG CAATGGATAG GAACTCCTTA CAGTCTGCTG TATCTAACAT TGCCCAGGCG   2760
CCTCTGTTTA TTCCCCCCAA TTCTGATCCT GTACCTGCCA GAGATTATCT TATATTGAAA   2820
GGAGTTTTAA CAGCAATGGG TTTGATAGGA ATCATTTGCC TTATTATAGT TGTGACACAT   2880
CATACTTTTAA GCAGGAAAAA GAGAGCAGAC AAGAAAGAGA ATGGAACAAA ATTATTATAA   2940
ATAAATATCC AAAGTGTCTT CCTTCTTAGA TATAAGACCC ATGGCCTTCG ACTACAAAAA   3000
CATACTAACA AAGTCAAATT AACATCAAAA CTGTATTAAA ATGCATTGAG TTTTTGTACA   3060
ATACAGATAA GATTTTTACA TGGTAGATCA ACAATTCTTT TTGGGGGTAG ATTAGAAAAC   3120
CCTTACACTT TGGCTATGAA CAAATAATAA AAATTATTCT TTAAAGTAAT GTCTTTAAAG   3180
GCAAAGGGAA GGGTAAAGTC GGACCAGTGT CAAGGAAAGT TTGTTTTATT GAGGTGGAAA   3240
AATAGCCCCA AGCAGAGAAA AGGAGGGTAG GTCTGCATTA TAACTGTCTG TGTGAAGCAA   3300
TCATTTAGTT ACTTTGATTA ATTTTTTCTTT TCTCCTTATC TGTGCAGTAC AGGTTGCTTG   3360
TTTACATGAA GATCATGCTA TATTTTATAT ATGTAGCCCC TAATGCAAAG CTCTTTACCT   3420
CTTGCTATTT TGTTATATAT ATTTCAGATG ACATCTCCCT GCTAATGCTC AGAGATCTTT   3480
TTTCACTGTA AGAGGTAACC TTTAACAATA TGGGTATTAC CTTTGTCTCT TCATACCGGT   3540
TTTATGACAA AGGTCTATTG AATTTATTTG TNTGTAAGTT TCTACTCCCA TCAAAGCAGC   3600
TTTCTAAGTT TATTGCCTTG GGTTATTATG GAATGATAGT TATAGCCCCN TATAATGCCT   3660
TACCTAGGAA A                                                        3671
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Seq ID NO: C80 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1413

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ATGAAGTTTC TTCTAATACT GCTCCTGCAG GCCACTGCTT CTGGAGCTCT TCCCCTGAAC    60
AGCTCTACAA GCCTGGAAAA AAATAATGTG CTATTTGGTG AAAGATACTT AGAAAAATTT   120
TATGGCCTTG AGATAAACAA ACTTCCAGTG ACAAAAATGA AATATAGTGG AAACTTAATG   180
AAGGAAAAAA TCCAAGAAAT GCAGCACTTC TTGGGTCTGA AAGTGACCGG GCAACTGGAC   240
ACATCTACCC TGGAGATGAT GCACGCACCT CGATGTGGAG TCCCCGATGT CCATCATTTC   300
AGGGAAATGC CAGGGGGGCC CGTATGGAGG AAACATTATA TCACCTACAG AATCAATAAT   360
TACACACCTG ACATGAACCG TGAGGATGTT GACTACGCAA TCCGGAAAGC TTTCCAAGTA   420
TGGAGTAATG TTACCCCCTT GAAATTCAGC AAGATTAACA CAGGCATGGC TGACATTTTG   480
GTGGTTTTTG CCCGTGGAGC TCATGGAGAC TTCCATGCTT TTGATGGCAA AGGTGGAATC   540
CTAGCCCATG CTTTTGGACC TGGATCTGGC ATTGGAGGGG ATGCACATTT CGATGAGGAC   600
GAATTCTGGA CTACACATTC AGGAGGCACA AACTTGTTCC TCACTGCTGT TCACGAGATT   660
GGCCATTCCT TAGGTCTTGG CCATTCTAGT GATCCAAAGG CCGTAATGTT CCCCACCTAC   720
AAATATGTTG ACATCAACAC ATTTCGCCTC TCTGCTGATG ACATACGTGG CATTCAGTCC   780
CTGTATGGAG ACCCAAAAGA GAACCAACGC TTGCCAAATC CTGACAATTC AGAACCAGCT   840
CTCTGTGACC CCAATTTGAG TTTTGATGCT GTCACTACCG TGGGAAATAA GATCTTTTTC   900
TTCAAAGACA GGTTCTTCTG GCTGAAGGTT TCTGAGAGAC CAAAGACCAG TGTTAATTTA   960
ATTTCTTCCT TATGGCCAAC CTTGCCATCT GGCATTGAAG CTGCTTATGA AATTGAAGCC  1020
AGAAATCAAG TTTTTCTTTT TAAAGATGAC AAAATACTGG TAATTAGCAA TTTAAGACCA  1080
GAGCCAAATT ATCCCAAGAG CATACATTCT TTTGGTTTTC CTAACTTTGT GAAAAAAATT  1140
GATGCAGCTG TTTTTAACCC ACGTTTTTAT AGGACCTACT TCTTTGTAGA TAACCAGTAT  1200
TGGAGGTATG ATGAAAGGAG ACAGATGATG GACCCTGGTT ATCCCAAACT GATTACCAAG  1260
AACTTCCAAG GAATCGGGCC TAAAATTGAT GCAGTCTTCT ACTCTAAAAA CAAATACTAC  1320
TATTTCTTCC AAGGATCTAA CCAATTTGAA TATGACTTCC TACTCCAACG TATCACCAAA  1380
ACACTGAAAA GCAATAGCTG GTTTGGTTGT TGA                                1413
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Seq ID NO: C81 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1413

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|          |          |          |          |          |
ATGAAGTTTC TTCTAATACT GCTCCTGCAG GCCACTGCTT CTGGAGCTCT TCCCCTGAAC    60
AGCTCTACAA GCCTGGAAAA AAATAATGTG CTATTTGGTG AAAGATACTT AGAAAAATTT   120
TATGGCCTTG AGATAAACAA ACTTCCAGTG ACAAAAATGA AATATAGTGG AAACTTAATG   180
AAGGAAAAAA TCCAAGAAAT GCAGCACTTC TTGGGTCTGA AAGTGACCGG GCAACTGGAC   240
ACATCTACCC TGGAGATGAT GCACGCACCT CGATGTGGAG TCCCCGATGT CCATCATTTC   300
AGGGAAATGC CAGGGGGGCC CGTATGGAGG AAACATTATA TCACCTACAG AATCAATAAT   360
TACACACCTG ACATGAACCG TGAGGATGTT GACTACGCAA TCCGGAAAGC TTTCCAAGTA   420
TGGAGTAATG TTACCCCCTT GAAATTCAGC AAGATTAACA CAGGCATGGC TGACATTTTG   480
GTGGTTTTTG CCCGTGGAGC TCATGGAGAC TTCCATGCTT TTGATGGCAA AGGTGGAATC   540
CTAGCCCATG CTTTTGGACC TGGATCTGGC ATTGGAGGGG ATGCACATTT CGATGAGGAC   600
GAATTCTGGA CTACACATTC AGGAGGCACA AACTTGTTCC TCACTGCTGT TCACGCCATT   660
GGCCATTCCT TAGGTCTTGG CCATTCTAGT GATCCAAAGG CCGTAATGTT CCCCACCTAC   720
AAATATGTTG ACATCAACAC ATTTCGCCTC TCTGCTGATG ACATACGTGG CATTCAGTCC   780
CTGTATGGAG ACCCAAAAGA GAACCAACGC TTGCCAAATC CTGACAATTC AGAACCAGCT   840
CTCTGTGACC CCAATTTGAG TTTTGATGCT GTCACTACCG TGGGAAATAA GATCTTTTTC   900
TTCAAAGACA GGTTCTTCTG GCTGAAGGTT TCTGAGAGAC CAAAGACCAG TGTTAATTTA   960
ATTTCTTCCT TATGGCCAAC CTTGCCATCT GGCATTGAAG CTGCTTATGA AATTGAAGCC  1020
AGAAATCAAG TTTTTCTTTT TAAAGATGAC AAAATACTGG TAATTAGCAA TTTAAGACCA  1080
GAGCCAAATT ATCCCAAGAG CATACATTCT TTTGGTTTTC CTAACTTTGT GAAAAAAATT  1140
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GATGCAGCTG TTTTTAACCC ACGTTTTTAT AGGACCTACT TCTTTGTAGA TAACCAGTAT    1200
TGGAGGTATG ATGAAAGGAG ACAGATGATG GACCCTGGTT ATCCCAAACT GATTACCAAG    1260
AACTTCCAAG GAATCGGGCC TAAAATTGAT GCAGTCTTCT ACTCTAAAAA CAAATACTAC    1320
TATTTCTTCC AAGGATCTAA CCAATTTGAA TATGACTTCC TACTCCAACG TATCACCAAA    1380
ACACTGAAAA GCAATAGCTG GTTTGGTTGT TGA                                 1413
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Seq ID NO: C82 DNA Sequence
Nucleic Acid Accession #: NM_006952.1
Coding sequence: 11..793

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1          11         21         31         41         51
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AATCCCGACA ATGGCGAAAG ACAACTCAAC TGTTCGTTGC TTCCAGGGCC TGCTGATTTT    60
TGGAAATGTG ATTATTGGTT GTTGCGGCAT TGCCCTGACT GCGGAGTGCA TCTTCTTTGT    120
ATCTGACCAA CACAGCCTCT ACCCACTGCT TGAAGCCACC GACAACGATG ACATCTATGG    180
GGCTGCCTGG ATCGGCATAT TTGTGGGCAT CTGCCTCTTC TGCCTGTCTG TTCTAGGCAT    240
TGTAGGCATC ATGAAGTCCA GCAGGAAAAT TCTTCTGGCG TATTTCATTC TGATGTTTAT    300
AGTATATGCC TTTGAAGTGG CATCTTGTAT CACAGCAGCA ACACAACGAG ACTTTTTCAC    360
ACCCAACCTC TTCCTGAAGC AGATGCTAGA GAGGTACCAA AACAACAGCC CTCCAAACAA    420
TGATGACCAG TGGAAAAACA ATGGAGTCAC CAAAACCTGG GACAGGCTCA TGCTCCAGGA    480
CAATTGCTGT GGCGTAAATG GTCCATCAGA CTGGCAAAAA TACACATCTG CCTTCCGGAC    540
TGAGAATAAT GATGCTGACT ATCCCTGGCC TCGTCAATGC TGTGTTATGA ACAATCTTAA    600
AGAACCTCTC AACCTGGAGG CTTGTAAACT AGGCGTGCCT GGTTTTTATC ACAATCAGGG    660
CTGCTATGAA CTGATCTCTG GTCCAATGAA CCGACACGCC TGGGGGGTTG CCTGGTTTGG    720
ATTTGCCATT CTCTGCTGGA CTTTTTGGGT TCTCCTGGGT ACCATGTTCT ACTGGAGCAG    780
AATTGAATAT TAAGAA                                                    796
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Seq ID NO: C83 DNA Sequence
Nucleic Acid Accession #: NM_001793.2
Coding sequence: 71..2560

```
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CTCTGCAGCC ATGGGGCTCC CTCGTGGACC TCTCGCGTCT CTCCTCCTTC TCCAGGTTTG    120
CTGGCTGCAG TGCGCGGCCT CCGAGCCGTG CCGGGCGGTC TTCAGGGAGG CTGAAGTGAC    180
CTTGGAGGCG GGAGGCGCGG AGCAGGAGCC CGGCCAGGCG CTGGGGAAAG TATTCATGGG    240
CTGCCCTGGG CAAGAGCCAG CTCTGTTTAG CACTGATAAT GATGACTTCA CTGTGCGGAA    300
TGGCGAGACA GTCCAGGAAA GAAGGTCACT GAAGGAAAGG AATCCATTGA AGATCTTCCC    360
ATCCAAACGT ATCTTACGAA GACACAAGAG AGATTGGGTG GTTGCTCCAA TATCTGTCCC    420
TGAAAATGGC AAGGGTCCCT TCCCCCAGAG ACTGAATCAG CTCAAGTCTA ATAAAGATAG    480
AGACACCAAG ATTTTCTACA GCATCACGGG GCCGGGGGCA GACAGCCCCC CTGAGGGTGT    540
CTTCGCTGTA GAGAAGGAGA CAGGCTGGTT GTTGTTGAAT AAGCCACTGG ACCGGGAGGA    600
GATTGCCAAG TATGAGCTCT TTGGCCACGC TGTGTCAGAG AATGGTGCCT CAGTGGAGGA    660
CCCCATGAAC ATCTCCATCA TCGTGACCGA CCAGAATGAC CACAAGCCCA AGTTTACCCA    720
GGACACCTTC CGAGGGAGTG TCTTAGAGGG AGTCCTACCA GGTACTTCTG TGATGCAGGT    780
GACAGCCACG GATGAGGATG ATGCCATCTA CACCTACAAT GGGGTGGTTG CTTACTCCAT    840
CCATAGCCAA GAACCAAAGG ACCCACACGA CCTCATGTTC ACCATTCACC GGAGCACAGG    900
CACCATCAGC GTCATCTCCA GTGGCCTGGA CCGGGAAAAA GTCCCTGAGT ACACACTGAC    960
CATCCAGGCC ACAGACATGG ATGGGGACGG CTCCACCACC ACGGCAGTGG CAGTAGTGGA    1020
GATCCTTGAT GCCAATGACA ATGCTCCCAT GTTTGACCCC CAGAAGTACG AGGCCCATGT    1080
GCCTGAGAAT GCAGTGGGCC ATGAGGTGCA GAGGCTGACG GTCACTGATC TGGACGCCCC    1140
CAACTCACCA GCGTGGCGTG CCACCTACCT TATCATGGGC GGTGACGACG GGGACCATTT    1200
TACCATCACC ACCCACCCTG AGAGCAACCA GGGCATCCTG ACAACCAGGA AGGGTTTGGA    1260
TTTTGAGGCC AAAAACCAGC ACACCCTGTA CGTTGAAGTG ACCAACGAGG CCCCTTTTGT    1320
GCTGAAGCTC CCAACCTCCA CAGCCACCAT AGTGGTCCAC GTGGAGGATG TGAATGAGGC    1380
ACCTGTGTTT GTCCCACCCT CCAAAGTCGT TGAGGTCCAG GAGGGCATCC CCACTGGGGA    1440
GCCTGTGTGT GTCTACACTG CAGAAGACCC TGACAAGGAG AATCAAAAGA TCAGCTACCG    1500
CATCCTGAGA GACCCAGCAG GGTGGCTAGC CATGGACCCA GACAGTGGGC AGGTCACAGC    1560
TGTGGGCACC CTCGACCGTG AGGATGAGCA GTTTGTGAGG AACAACATCT ATGAAGTCAT    1620
GGTCTTGGCC ATGGACAATG GAAGCCCTCC CACCACTGGC ACGGGAACCC TTCTGCTAAC    1680
ACTGATTGAT GTCAATGACC ATGGCCCAGT CCCTGAGCCC CGTCAGATCA CCATCTGCAA    1740
CCAAAGCCCT GTGCGCCAGG TGCTGAACAT CACGGACAAG GACCTGTCTC CCCACACCTC    1800
CCCTTTCCAG GCCCAGCTCA CAGATGACTC AGACATCTAC TGGACGGCAG AGGTCAACGA    1860
GGAAGGTGAC ACAGTGGTCT TGTCCCTGAA GAAGTTCCTG AAGCAGGATA CATATGACGT    1920
GCACCTTTCT CTGTCTGACC ATGGCAACAA AGAGCAGCTG ACGGTGATCA GGGCCACTGT    1980
GTGCGACTGC CATGGCCATG TCGAAACCTG CCCTGGACCC TGGAAGGGAG GTTTCATCCT    2040
CCCTGTGCTG GGGGCTGTCC TGGCTCTGCT GTTCCTCCTG CTGGTGCTGC TTTTGTTGGT    2100
GAGAAAGAAG CGGAAGATCA AGGAGCCCCT CCTACTCCCA GAAGATGACA CCCGTGACAA    2160
CGTCTTCTAC TATGGCGAAG AGGGGGGTGG CGAAGAGGAC CAGGACTATG ACATCACCCA    2220
GCTCCACCGA GGTCTGGAGG CCAGGCCGGA GGTGGTTCTC CGCAATGACG TGGCACCAAC    2280
CATCGATCCCG ACACCCATGT ACCGTCCTCG GCCAGCCAAC CCAGATGAAA TCGGCAACTT    2340
TATAATTGAG AACCTGAAGG CGGCTAACAC AGACCCCACA GCCCCGCCCT ACGACACCCT    2400
CTTGGTGTTC GACTATGAGG GCAGCGGCTC CGACGCGCGG TCCCTGAGCC CCTCACCTC    2460
CTCCGCCTCC GACCAAGACC AAGATTACGA TTATCTGAAC GAGTGGGGCA GCCGCTTCAA    2520
GAAGCTGGCA GACATGTACG GTGGCGGGGA GGACGACTAG GCGGCCTGCC TGCAGGGCTG    2580
GGGACCAAAC GTCAGGCCAC AGAGCATCTC CAAGGGGTCT CAGTTCCCCC TTCAGCTGAG    2640
GACTTCGGAG CTTGTCAGGA AGTGGCCGTA GCAACTTGGC GGAGACAGGC TATGAGTCTG    2700
ACGTTAGAGT GGTTGCTTCC TTAGCCTTTC AGGATGGGCA AATGTGGGCA GTTTGACTTC    2760
AGCACTGAAA ACCTCTCCAC CTGGGCCAGG GTTGCCTCAG AGGCCAAGTT TCCAGAAGCC    2820
TCTTACCTGC CGTAAAATGC TCAACCCTGT GTCCTGGGCC TGGGCCTGCT GTGACTGACC    2880
TACAGTGGAC TTTCTCTCTG GAATGGAACC TTCTTAGGCC TCCTGGTGCA ACTTAATTTT    2940
TTTTTTTAAT GCTATCTTCA AAACGTTAGA GAAAGTTCTT CAAAAGTGCA GCCCAGAGCT    3000
GCTGGGCCCA CTGGCCGTCC TGCATTTCTG GTTTCCAGAC CCCAATGCCT CCCATTCGGA    3060
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          TGGATCTCTG CGTTTTTATA CTGAGTGTGC CTAGGTTGCC CCTTATTTTT TATTTTCCCT   3120
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          TAAAGAAACT TTTCCCAGAA AAAA                                          3205
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5   Seq ID NO: C84 DNA Sequence
    Nucleic Acid Accession #: NM_005629.1
    Coding sequence: 639..2546

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          CCGCCGCCAC CACCGCCACC GGAGTCGCGG GCCAGCCGGG CAGCCTCCGC GGGCCCCGGC   180
15        CGGGGCGGGG GGCGCGGGGC ACAGGCCCCT GCTCCGGCCG TCGTTTGCAG ACCGCGGGCG   240
          CCGATGTCGC CCGCGCCCCG TTAGGATGAG TCTCGGGTCG GGCGAGGAGC CGCCGCAGCC   300
          GCCGCCGCCC GAGCCGCGGG CAGGAGCCTC GGGAGCCGCC GCCGCCGCCG CCGCCGCCCG   360
          GCCGGGCCCC GACGCCGCCC GCGCGCCCCC GGGCCCCCGA CACACATGAG ATTCTTCAGG   420
          CTCACTTTCA AGTGCTTCGT GGACTGCTTC TGACTGCGCC GCCCGCGCCC CGCACCCCGC   480
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          TAGAGATCTC GCTGGGCCAG TTCATGAAGG CCGGCAGCAT CAATGTCTGG AACATCTGTC   1020
          CCCTGTTCAA AGGCCTGGGC TACGCCTCCA TGGTGATCGT CTTCTACTGC AACACCTACT   1080
30        ACATCATGGT GCTGGCCTGG GGCTTCTATT ACCTGGTCAA GTCCTTTACC ACCACGCTGC   1140
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35        TCTGTGTCTG GAAGGGGGTC AAATCCACGG GAAAGATCGT GTACTTCACT GCTACATTCC   1440
          CCTACGTGGT CCTGGTCGTG CTGCTGGTGC GTGGAGTGCT GCTGCCTGGC GCCCTGGATG   1500
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          GCCTCCTCGA CCTCCTCCCG GCCTCCTACT ACTTCCGTTT CCAAAGGGAG ATCTCTGTGG   1980
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          TTTGGGAGTG CGTGGTGGTG GCCTGGGTGT ACGGAGCTGA CCGCTTCATG GACGACATTG   2160
          CCTGTATGAT CGGGTACCGA CCTTGCCCCT GGATGAAATG GTGCTGGTCC TTCTTCACCC   2220
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55        GCCATAGCAG CCCCTGCTTC AGCCCCACCG CACCCCTCCA GGGGGCCTGC CTTTCCCTGA   2640
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          CAGTGCTGCA CTCCTCCTGC CCCTGCCACG CCCACCCCCT GCCCACCTCT CCAGGCTCTG   2880
60        CTCTGCAGCA CACCCGTGGG TGACCCCTCA CCCCAGAAGC AGCAGTGGCA GCTTGGGAAA   2940
          TGTGAGGAAG GGAAGGAGGG AGAGACGGGA GGGGAGGAGAG AGAGGAGGAG GGAGGCAGGG   3000
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          CCTACCTTAC CCCTCTGCCC CTAGCCAAGG AGTGTGAATT TATAGATCTA ACTTTCATAG   3420
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          GGGCTGCTAA CCTGGCCTGC TCAGGCTTCC CACCCTGTGC GGGGCACACC CCCAGGAAGG   3660
          GACCCTGGAC ACGGCTCCCA CGTCCAGGCT TAAGGTGGAT GCACTTCCCG CACCTCCAGT   3720
          CTTCTGTGTA GCAGCTTTAA CCCACGTTTG TCTGTCACGT CCAGTCCCGA GACGGCTGAG   3780
75        TGACCCCAAG AAAGGCTTCC CCGACACCCA GACAGAGGCT GCAGGGCTGG GGCTGGGTGA   3840
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    Seq ID NO: C85 DNA Sequence
    Nucleic Acid Accession #: NM_006516.1
80 Coding sequence: 180..1658

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        CGCACGCCCG TCGCCACCCG CGTACCCGGTC GCAGCCAGAG CCACCAGCGC AGCGCTGCCA    180
        TGGAGCCCAG CAGCAAGAAG CTGACGGGTC GCCTCATGCT GGCTGTGGGA GGAGCAGTGC    240
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5       AGGAGTTCTA CAACCAGACA TGGGTCCACC GCTATGGGGA GAGCATCCTG CCCACCACGC    360
        TCACCACGCT CTGGTCCCTC TCAGTGGCCA TCTTTTCTGT TGGGGGCATG ATTGGCTCCT    420
        TCTCTGTGGG CCTTTTCGTT AACCGCTTTG GCCGGCGGAA TTCAATGCTG ATGATGAACC    480
        TGCTGGCCTT CGTGTCCGCC GTGCTCATGG GCTTCTCGAA ACTGGGCAAG TCCTTTGAGA    540
        TGCTGATCCT GGGCCGCTTC ATCATCGGTG TGTACTGCGG CCTGACCACA GGCTTCGTGC    600
10      CCATGTATGT GGGTGAAGTG TCACCCACAG CCTTTCGTGG GGCCCTGGGC ACCCTGCACC    660
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15      TGCAGGAGAT GAAGGAAGAG AGTCGGCAGA TGATGCGGGA GAAGAAGGTC ACCATCCTGG    960
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        GCTTCCAGTA TGTGGAGCAA CTGTGTGGTC CCTACGTCTT CATCATCTTC ACTGTGCTCC   1500
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        GCCTGCTCCC AGCAGCCCTA AGGATCTCTC AGGAGCACAG GCAGCTGGAT GAGACTTCCA   1740
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        AAATCTATTC AGACAAGCAA CAGGTTTTAT AATTTTTTTA TTACTGATTT TGTTATTTTT   1920
        ATATCAGCCT GAGTCTCCTG TGCCCACATC CCAGGCTTCA CCCTGAATGG TTCCATGCCT   1980
        GAGGGTGGAG ACTAAGCCCT GTCGAGACAC TTGCCTTCTT CACCCAGCTA ATCTGTAGGG   2040
        CTGGACCTAT GTCCTAAGGA CACACTAATC GAACTATGAA CTACAAAGCT TCTATCCCAG   2100
35      GAGGTGGCTA TGGCCACCCG TTCTGCTGGC CTGGATCTCC CCACTCTAGG GGTCAGGCTC   2160
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        GCCGGGTTCT AGTCTCCTTT GCACTGAGGG CCACACTATT ACCATGAGAA GAGGGCCTGT   2340
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40      TGCAAGATAT TTATATATAT TTTTGGTTGT CAATATTAAA TACAGACACT AAGTTATAGT   2460
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        TTTGATGGG AGTGAGACAG AAGTAAGTGG GGTTGCAACC ACTGCAACGG CTTAGACTTC   2640
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45      TTTGATCCCT GTTACCCAGA GAATATATAC ATTCTTTATC TTGACATTCA AGGCATTTCT   2760
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        AGGCTTGAAA TCGCATTATT TTGAATGTGA AGGGAA                            2856
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        TGCGGGCCCG AAGCGGCGCG CGCTAGCGGC GCCGGCGGCC GAGGAGAAGG AAGAGGCGCG    120
        GGAGAAGATG CTGGCCGCCA AGAGCGCGGA CGGCTCGGCG CCGGCAGGCG AGGGCGAGGG    180
        CGTGACCCTG CAGCGGAACA TCACGCTGCT CAACGGGCGTG GCCATCATCG TGGGGACCAT    240
60      TATCGGCTCG GGCATCTTCG TGACGCCCAC GGGCGTGCTC AAGGAGGCAG GCTCGCCGGG    300
        GCTCGGCGCTG GTGGTGTGGG CCGCGTGCGG CGTCTTCTCC ATCGTGGGCG CGCTCTGCTA    360
        CGCGGAGCTC GGCACCACCA TCTCCCAAATC GGGCGGCGAC TACGCCTACA TGCTGGAGGT    420
        CTACGGCTCG CTGCCCGCCT TCCTCAAGCT CTGGATCGAG CTGCTCATCA TCCCGGCCTTC    480
        ATCCAGTACA ATCGTGGCCC TGGTCTTCGC CACCTACCTG CTCAAGCCAC TCTTCCCCAC    540
        CTGCCCGGTG CCCGAGGAGG CAGCCAAGCT CGTGGCCTGC CTCTGCGTGC TGCTGCTCAC    600
65      GGCCGTGAAC TGCTACAGCG TGAAGGCCGC CACCCGGGTC CAGGATGCCT TTGCCGCCGC    660
        CAAGCTCCTG CGCCTGGCCC TGATCATCCT GCTGGGCTTC GTCCAGATCG GAAAGGGTGA    720
        TGTGTCCAAT CTAGATCCCA ACTTCTCATT TGAAGGCACC AAACTGGATG TGGGGAACAT    780
        TGTGCTGGCA TTATACAGCG GCCTCTTTGC CTATGGAGGA TGGAATTACT TGAATTTCGT    840
        CACAGAGGAA ATGATCAACC CCTACAGAAA CCTGCCCCTG GCCATCATCA TCTCCCTGCC    900
70      CATCGTGACG CTGGTGTACG TGCTGACCAA CCTGGCCTAC TTCACCACCG TGTCCACCGA    960
        GCAGATGCTG TCGTCCGAGG CCGTGGCCGT GGACTTCGGG AACTATCACC TGGGCGTCAT   1020
        GTCCTGGATC ATCCCCGTCT TCGTGGGGCCT GTCCTGCTTC GGCTCCGTCA ATGGGTCCCT   1080
        GTTCACATCC TCCAGGCTCT TCTTCGTGGG GTCCCGGGAA GGCCACCTGC CCTCCATCCT   1140
        CTCCATGATC CACCCACAGC TCCTCACCCC CGTGCCGTCC CTCGTGTTCA CGTGTGTGAT   1200
75      GACGCTGCTC TACGCCTTCT CCAAGGACAT CTTCTCCGTC ATCAACTTCT TCAGCTTCTT   1260
        CAACTGGCTC TGCGTGGCCC TGGCCATCAT CGGCATGATC TGGCTGCGCC ACAGAAAGCC   1320
        TGAGCTTGAG CGGCCCATCA AGGTGAACCT GGCCCTGCCT GTGTTCTTCA TCCTGGCCTG   1380
        CCTCTTCCTG ATCGCCCGTCT CCTTCTGGAA GACACCCGTG GAGTGTGGCA TCGGCTTCAC   1440
        CATCATCCTC AGCGGGCTGC CCGTCTACTT CTTCGGGGTC TGGTGGAAAA ACAAGCCCAA   1500
80      GTGGCTCCTC CAGGGCATCT TCTCCACGAC CGTCCTGTGT CAGAAGCTCA TGCAGGTGGT   1560
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Coding sequence: 168..989

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TGTCTCTGGT CTTCATCTTC CGCGTGCTGG TGTACCTGGT GACGGCCGAG CGTGTGTGGA   300
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TGTGCACAGG TCATCACCCC CACGGTACCA CCTCTTCCTG CAAACAAGAC GACCTCCTTT   900
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GAGACCATGT GAAGAAAACC ATCTTGTGAG GGGCTGCCTG GACTGGTCTG GCAGGTTGGG  1020
CCTGGATGGG GGGGCTCTAG CATCTCTCAT AGGTGCAACC TGAGAGTGGG GGAGCTAAGC  1080
CATGAGGTAG GGGCAGGCAA GAGAGAGGAT TCAGACGCTC TGGGAGCCAG TTCCTAGTCC  1140
TCAACTCCAG CCACCTGCCC CAGCTCGACG GCACTGGGCC AGTTCCCCCT CTGCTCTGCA  1200
GCTCGGTTTC CTTTTCTAGA ATGGAAATAG TGAGGGCCAA TGC                    1243
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Seq ID NO: C88 DNA Sequence
Nucleic Acid Accession #: NM_005130
Coding sequence: 98..802

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GAATGGACTT CACAGCAAAG TGGTCTCAGA ACAAAAGGAC ACTCTGGGCA ACACCCAGAT   240
TAAGCAGAAA AGCAGGCCCG GGAACAAAGG CAAGTTTGTC ACCAAAGACC AAGCCAACTG   300
CAGATGGGCT GCTACTGAGC AGGAGGAGGG CATCTCTCTC AAGGTTGAGT GCACTCAGAT   360
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ATATTCCAAG ACAGCTGTGA AAACCAGAGT GTGCAGAAAG GATTTTCCAG AATCCAGTCT   540
TAAGCTAGTC AGCTCCACTC TATTTGGGAA CACAAAGCCC AGGAAGGAGA AAACAGAGAT   600
GTCCCCCAGG GAGCACATCA GGGCAAAGA GACCACCCCC TCTAGCCTAG CAGTGACCCA   660
GACCATGGCC ACCAAAGCTC CCGAGTGTGT GGAGGACCCA GATATGGCCA ACCAGAGGAA   720
GACTGCCCTG GAGTTCTGTG GAGAGACTTG GAGCTCTCTC TGCACATTCT TCCTCAGCAT   780
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TGTCGTAAGT CCCTCTGTAT ACTTTAAAGC TCTCTACAGT CCCCCCAAAA TATGAACTTT   900
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TTCCATGGCC CACACAGCTA TGTGTTTGAG CAGCGAAGAG TCTTTGAGCT GAATGAGCCA  1080
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Seq ID NO: C89 DNA Sequence
Nucleic Acid Accession #: BC022542
Coding sequence: 274..927

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GGCTCACGCG CGGGCCCGCC ACGGCCTTCA CCGCGCGCGG CTCGCACGCC GGCATAAGGG   240
CCATGTGTTC TGAAATTATT TTGAGGCAAG AAGTTTTGAA AGATGGTTTC CACAGAGACC   300
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CCTTGGTAAT CCTCAAGCAT CAGATGCCAT AAGGGGAAAC TTAATTCTGC TAAATTAATG  1140
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TTTGGGAGGC CGAGGTGGGC GGATCACCAG AGGTCAAGAG TTTGAGACCA GCTTGGTGAA  1380
ACCCTGTCTC TACTAAAAAT ACAAAAGTTA GCTGGGGCTG GTGGGAGGCA TCTGTAGTCC  1440
CAGCTAATTG GAAGGGTGAG GCGGGAGGAT CGCTTGAACC TGGGAGGCGG AGGTTCCAGA  1500
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ATGTCATGAG ACTATTAAAG ATGTGCCAGA GTTTCAATGA AAATCATTAA AGTAGGACAG   1680
CTAAGAAATT AATATTAATA TAAAAATTAT TGATAATCTT AAATTATTGA TTATTCCTTA   1740
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GGACTTGATG AAACTGAGTA CTAAGATTTG GTACAGAGTA TGTCAGGAAG ACAACTCAGA   1860
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Seq ID NO: C90 DNA Sequence
Nucleic Acid Accession #: NM_004994
Coding sequence: 20..2143

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CACTCGGGTG GCAGAGATGC GTGGAGAGTC GAAATCTCTG GGGCCTGCGC TGCTGCTTCT   240
CCAGAAGCAA CTGTCCCTGC CCGAGACCGG TGAGCTGGAT AGCGCCACGC TGAAGGCCAT   300
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Seq ID NO: C91 Sequence
Nucleic Acid Accession #: NM_000213
Coding sequence: 188.5656

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Seq ID NO: C92 DNA Sequence
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Seq ID NO: C94 DNA Sequence
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Coding sequence: 186..1190

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Seq ID NO: C95 DNA Sequence
Nucleic Acid Accession #: NM_002510.1
Coding sequence: 92..1774

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Seq ID NO: C96 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1_4247

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Coding sequence: 77..4518

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1258

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Seq ID NO: C100 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 148..4362

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1263

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Seq ID NO: C106 DNA Sequence
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Seq ID NO: C110 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 939..2372

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          CTGTGGTGTG AATTAGGGAC CGGGAGGCGT CGAACGGAGG AACGGTTCAT CTTAGAGACT   360
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Seq ID NO: C111 DNA Sequence
Nucleic Acid Accession #: NM_130830.1
Coding sequence: 1..1746

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     CTCAACACGC ACATCACTGA ACTCAATGAG TCCCCGTTCC TCAATATCTC AGCCCTCATC   240
     GCCCTGAGGA TTGAGAAGAA TGAGCTGTCG CGCATCACGC CTGGGGCCTT CCGAAACCTG   300
     GGCTCGCTGC GCTATCTCAG CCTCGCCAAC AACAAGCTGC AGGTTCTGCC CATCGGCCTC   360
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     CTGGAATACA TCCCTGACGG AGCCTTCGAC CACCTGGTAG GACTCACGAA GCTCAATCTG   540
     GGCAAGAATA GCCTCACCCA CATCTCACCC AGGGTCTTCC AGCACCTGGG CAATCTCCAG   600
     GTCCTCCGGC TGTATGAGAA CAGGCTCACG GATATCCCCA TGGGCACTTT TGATGGGCTT   660
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Seq ID NO: C112 DNA Sequence
Nucleic Acid Accession #: NM_002658.1
Coding sequence: 77..1372

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Seq ID NO: C113 DNA Sequence
Nucleic Acid Accession #: XM_087254.1
Coding sequence: 47..2332

1271

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40    AGGAAGATGT AGTCCAACCC ACATCAGCAG ATCATGGAGT GCATCGGATC CTTTCTATAC 2280
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Seq ID NO: C114 DNA Sequence
Nucleic Acid Accession #: XM_087461.1
Coding sequence: 236..1138

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CCGCTCGCCA TGCAACCGCC GCCGGCCTCG CGCGCGTAGG CGCCCGCCGC AGGCCATGCT     240
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GCCCTAGATT CATGGCAGAA AATGACCAAA TCCTGTGTAT TTGTTTTATA TATTTAATAA    1500
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Seq ID NO: C115 DNA Sequence
Nucleic Acid Accession #: XM_051522.4
Coding sequence: 127..1215

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Seq ID NO: C116 DNA Sequence
Nucleic Acid Accession #: NM_000350.1
Coding sequence: 82..6903

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     GTGAGCATCA TCAGAAAAGG GAGGGCTGTG GTCCTCACAT CCCACAGCAT GGAAGAATGT   6480
     GAGGCACTGT GTACCCGGCT GGCCATCATG GTAAAGGGCG CCTTTCGATG TATGGGCACC   6540
     ATTCAGCATC TCAAGTCCAA ATTTGGAGAT GGCTATATCG TCACAATGAA GATCAAATCC   6600
45   CCGAAGGACG ACCTGCTTCC TGACCTGAAC CCTGTGGAGC AGTTCTTCCA GGGGAACTTC   6660
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     TCCCTGGCGA GGATCTTCCA GCTCCTCCTC TCCCACAAGG ACAGCCTGCT CATCGAGGAG   6780
     TACTCAGTCA CACAGACCAC ACTGGACCAG GTGTTTGTAA ATTTTGCTAA ACAGCAGACT   6840
     GAAAGTCATG ACCTCCCTCT GCACCCTCGA GCTGCTGAG CCAGTCGACA AGCCCAGGAC   6900
50   TGATCTTTCA CACCGCTCGT TCCTGCAGCC AGAAAGGAAC TCTGGGCAGC TGGAGGCGCA   6960
     GGAGCCTGTG CCCATATGGT CATCCAAATG GACTGGCCCA GCGTAAATGA CCCCACTGCA   7020
     GCAGAAAACA AACACACGAG GAGCATGCAG CGAATTCAGA AAGAGGTCTT TCAGAAGGAA   7080
     ACCGAAACTG ACTTGCTCAC CTGGAACACC TGATGGTGAA ACCAAACAAA TACAAAATCC   7140
     TTCTCCAGAC CCCAGAACTA GAAACCCCGG GCCATCCCAC TAGCAGCTTT GGCCTCCATA   7200
55   TTGCTCTCAT TTCAAGCAGA TCTGCTTTTC TGCATGTTTG TCTGTGTGTC TGCGTTGTGT   7260
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Seq ID NO: C117 DNA Sequence
Nucleic Acid Accession #: NM_006671.2
Coding sequence: 138..1820

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     AGCAGGCCAG GCTCACCATG GTGCCGCATG CCATCTTGGC ACGGGGGAGG GACGTGTGCA   180
     GGCGGAATGG ACTCCTCATC CTGTCTGTGC TGTCTGTCAT CGTGGGCTGC CTCCTCGGCT   240
     TCTTCTTGAG GACCCGGCGC CTCTCACCAC AGGAAATTAG TTACTTCCAG TTCCCTGGAG   300
     AGCTCCTGAT GAGGATGCTG AAGATGATGA TCCTGCCACT GGTGGTCTCC AGCTTGATGT   360
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     ACCCAGGCAG CGCGGCCCAG AAGGAGACCA CGGAGCAGAG TGGGAAGCCC ATCATGAGCT   540
     CAGCCGATGC CCTGTTGGAC CTCATCCGGA ACATGTTCCC AGCCAACCTA GTAGAAGCCA   600
     CATTCAAACA GTACCGCACC AAGACCACCC CAGTTGTCAA GTCCCCCAAG GTGGCACCAG   660
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     GCACCAGCGA TGGCATGAAT GTGCTGGGCA TCGTCTTCTT CTCTGCCACC ATGGGCATCA   840
     TGCTGGGCCG CATGGGTGAC AGCGGGGCCC CCCTGGTCAG CTTCTGCCAG TGCCTCAATG   900
     AGTCGGTCAT GAAGATCGTG GCGGTGGCTG TGTGGTATTT CCCCTTCGGC ATTGTGTTCC   960
     TCATTGCGGG TAAGATCCTG GAGATGGACG ACCCCAGGGC CGTCGGCAAG AAGCTGGGCT   1020
     TCTACTCAGT CACCGTGGTG TGCGGGCTGG TGCTCCACGG GCTCTTTATC CTGCCCCTGC   1080
     TCTACTTCTT CATCACCAAG AAGAATCCCA TCGTCTTCAT CCGCGGCATC CTGCAGGCTC   1140
     TGCTCATCGC GCTGGCCACC TCCTCCAGCT CAGCCACACT GCCCATCACC TTCAAGTGCC   1200
     TGCTGGAGAA CAACCACATC GACCGGCGCA TCGCTCGCTT CGTGCTGCCC GTGGGTGCCA   1260
     CCATCAACAT GGACGGCACT GCGCTCTACG AGGCTGTGGC CGCCATCTTC ATCGCCCAGG   1320
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     TCAACAACTA CGAGCTGGAC TTTGGCCAGA TCATCACCAT CAGTATCACA GCCACTGCAG   1380
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     CCTCCGTGGG ACTGCCCACC GATGACATCA CCCTCATCAT TGCCGTTGAC TGGGCTCTGG   1500
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     CCAAGCCAGT GAGCCTCCAG GAGATCGTGG CAGCCCAGCA GAATGGCTGT GTGAAGAGTG   1680
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     TGGAGCGGGA TGAGGAGCTG CCCGCTGCGA GTCTGAACCA CTGCACCATC CAGATCAGCG   1800
     AGCTGGAGAC CAATGTCTGA GCCTGCGGAG CTGCAGGGGC AGGCGAGGCC TCCAGGGGCA   1860
     GGGTCCTGAG GCAGGAACTC GACTCTCCAA CCCTCCTGAG CAGCCGGCAG GGGCCAGGAT   1920
     CACACATTCT TCTCACCCTT GAGAGGCTGG AATTAACCCC GCTTGACGGA AAATGTATCT   1980
     CAGAGAAGGG AAAGGCTGCA TGGGGGAGCC CCATCCAGGG AGTGATGGGC CCGGCATTGC   2040
     CTGAGGCCCC GCTGTGACAG TTTCCCCGGT GTGAGCCCGG TGAGGGCGGC AGGCAGGGGT   2100
     TATCCGGCCC CACTTTCTGG ATGACAGACT TGAGGCTCTG AGAGCTGAAA ACACTTGTCC   2160
     AAGGTCTCAC GTTAAGGTCA AGACACTAAC TCAAATCTTT CAAGCCCCGC CTCTCCTCTT   2220
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     TCAGCCACAC AGTTCTCCCC AAGGGGAGCA GCCCAGGGCC AAGCCCCGCT GCCTTCCCCA   2340
     GGCCACAGTG CGTCCAGTCT CCTGTCCTGC CACGTGTCTT TTGCAAAGCT CCTTGGATGT   2400
     GGAGACAGAT GTCTTTACTA GAGCTGAAAG GCCCCCTTGA CACATCCAGG CCAACCTCCC   2460
     ATGGAATAGG TAGGCAAGCC AGGACTCCGG GAAGGAGGTG CAGCCAGGAT GCTCTGGTGG   2520
     AGCTGCCGAT GGGGCCCTGG TGTCAGAACT CCCCAAAGGC CTGTGCGTCC AAGTGGAGTC   2580
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Seq ID NO: C118 DNA Sequence
Nucleic Acid Accession #: NM_005689
Coding sequence: 278..2806

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     GCCAAGGCAC CCGGATGTCC GCGCCCCTCT CCGAGTGACA AGTCCCGGCC TCCGGTCCCG   240
     CAGTGCCCGC AGCCTGGCC GGCGTCCACG CATTGCCATG GTGACTGTGG GCAACTACTG   300
     CGAGGCCGAA GGGCCCGTGG GTCCGGCCTG GATGCAGGAT GGCCTGAGTC CCTGCTTCTT   360
     CTTCACGCTC GTGCCCTCGA CGCGGGATGG TCTAGGGACT CTGGCCTTGG TGCTGGCTCT   420
     TCCCTGCAGA CGCCGGGAGC GGCCCGCTGG TGCTGATTCG CTGTCTTGGG GGGCCGGCCA   480
     TCGCATCTCT CCCTACGTGC TGCAGCTGCT TCTGGCCACA CTTCAGGCGG CGCTGCCCCT   540
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     TCTGGCCTCC GTGCTGGAGA GTCTGGCCGG CGCCTGTGGC CTGTGGCTGG TTGTCGTGGA   660
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     GTGGGTGCTG CGGTATGTGG TCTCTGGAGG GCTGTTTGTC CTGGGTCTCT GGGCCCCTGG   900
     ACTTCGTCCC CAGTCCTATA CATTGCAGGT TCATGAAGAG GACCAAGATG TGGAAAGGAG   960
     CCAGGTTCGG TCAGCAGCCC AACAGTCTAC CTGGCGAGAT TTTGGCAGGA AGCTCCGCCT   1020
     CCTGAGTCGG TACCTGTGGC CTCGAGGGAG TCCAGCTCTG CAGCTGGTGG TGCTCATCTG   1080
     CCTGGGGCTC ATGGGTTTGG AACGGGCACT CAATGTGTTG GTGCCTATAT TCTATAGGAA   1140
     CATTGTGAAC TTGCTGACTG AGAAGGCACC TTGGAACTCT CTGGCCTGGA CTGTTACCAG   1200
     TTACGTCTTC CTCAAGTTCC TCCAGGGGGG TGGCACTGGC AGTACAGGCT TCGTGAGCAA   1260
     CCTGCGCACC TTCCTGTGGA TCCGGGTGCA GCAGTTCACG TCTCGGCGGG TGGAGCTGCT   1320
     CATCTTCTCC CACCTGCACG AGCTCTCACT GCGCTGGCAC CTGGGGCGCC GCACAGGGGA   1380
     GGTGCTGCGG ATCGCGGATC GGGGCACATC CAGTGTCACA GGCTGCTCA GCTACCTGGT   1440
     GTTCAATGTC ATCCCCACGC TGGCCGACAT CATCATTGGC ATCATCTACT TCAGCATGTT   1500
     CTTCAACGCC TGGTTTGGCC TCATTGTGTT CCTGTGCATG AGTCTTTACC TCACCCTGAC   1560
     CATTGTGGTC ACTGAGTGGA GAACCAAGTT TCGTCGTGCT ATGAACACAC AGGAGAACGC   1620
     TACCCGGGCA CGAGCAGTGG ACTCTCTGCT AAACTTCGAG ACGGTGAAGT ATTACAACGC   1680
     CGAGAGTTAC GAAGTGGAAC GCTATCGAGA GGCCATCATC AAATATCAGG GTTTGGAGTG   1740
     GAAGTCGAGC GCTTCACTCG TTTTACTAAA TCAGACCCAG AACCTGGTGA TTGGGCTCGG   1800
     GCTCCTCGCC GGCTCCCTGC TTTGCGCATA CTTTGTCACT GAGCAGAAGC TACAGGTTGG   1860
     GGACTATGTG CTCTTTGGCA CCTACATTAT CCAGCTGTAC ATGCCCCTCA ATTGGTTTGG   1920
     CACCTACTAC AGGATGATCC AGACCAACTT CATTGACATG GAGAACATGT TTGACTTGCT   1980
     GAAAGAGGAG ACAGAAGTGA AGGACCTTCC TGGAGCAGGG CCCCTTCGCT TTCAGAAGGG   2040
     CCGTATTGAG TTTGAGAACG TGCACTTCAG CTATGCCGAT GGGCGGGAGA CTCTGCAGGA   2100
     CGTGTCTTTC ACTGTGATGC CTGGACAGAC ACTTGCCCTG GTGGGCCCAT CTGGGGCAGG   2160
     GAAGAGCACA ATTTTGCGCC TGCTGTTTCG CTTCTACGAC ATCAGCTCTG GCTGCATCCG   2220
     AATAGATGGG CAGGACATTT CACAGGTGAC CCAGGCCTCT CTCCGGTCTC ACATTGGAGT   2280
     TGTGCCCCAA GACACTGTCC TCTTTAATGA CACCATCGCC GACAATATCC GTTACGGCCG   2340
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     GGTCAATGCT GACCAGATCC TCGTCATCAA GGATGGCTGC ATCGTGGAGA GGGGACGACA   2700
     CGAGGCTCTG TTGTCCCGAG GTGGGGTGTA TGCTGACATG TGGCAGCTGC AGCAGGGACA   2760
     GGAAGAAACC TCTGAAGACA CTAAGCCTCA GACCATGGAA CGGTGACAAA AGTTTGGCCA   2820
     CTTCCCTCTC AAAGACTAAC CCAGAAGGGA ATAAGATGTG TCTCCTTTCC CTGGCTTATT   2880
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Seq ID NO: C119 DNA Sequence
Nucleic Acid Accession #: NM_000676
Coding sequence: 333..1331

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        GTCCCGGCCA CCAGCGCCCC AGCCCCGAGG CTCAGAAGCG CAGGCGGGAG GCGCGGGTCCG   240
        GGCGCTATGG CCATGCCCGG CGGGTCTCAC GCGGCTGCCC CTCGCCCGGC GCGCCTTCGG   300
   10   TAGGGGGCGC CCGGGGCCCA GCTGGCCCGG CCATGCTGCT GGAGACACAG GACGCGCTGT   360
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        CTGCGGCCGA CGTGGCCGTG GGGCTCTTCG CCATCCCCTT TGCCATCACC ATCAGCCTGG   540
        GCTTCTGCAC TGACTTCTAC GGCTGCCTCT TCCTCGCCTG CTTCGTGCTG GTGCTCACGC   600
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        GGGTCCTTGC CTTTGGCATC GGATTGACTC CATTCCTGGG GTGGAACAGT AAAGACAGTG   780
        CCACCAACAA CTGCACAGAA CCCTGGGATG GAACCACGAA TGAAAGCTGC TGCCTTGTGA   840
        AGTGTCTCTT TGAGAATGTG GTCCCCATGA GCTACATGGT ATATTTCAAT TTCTTTGGGT   900
   20   GTGTTCTGCC CCCACTGCTT ATAATGCTGG TGATCTACAT TAAGATCTTC CTGGTGGCCT   960
        GCAGGCAGCT TCAGCGCACT GAGCTGATGG ACCACTCGAG GACCACCCTC CAGCGGGAGA  1020
        TCCATGCAGC CAAGTCACTG GCCATGATTG TGGGGATTTT TGCCCTGTGC TGGTTACCTG  1080
        TGCATGCTGT TAACTGTGTC ACTCTTTTCC AGCCAGCTCA GGGTAAAAAT AAGCCCAAGT  1140
        GGGCAATGAA TATGGCCATT CTTCTGTCAC ATGCCAATTC AGTTGTCAAT CCCATTGTCT  1200
   25   ATGCTTACCG GAACCGAGAC TTCCGCTACA CTTTTCACAA AATTATCTCC AGGTATCTTC  1260
        TCTGCCAAGC AGATGTCAAG AGTGGGAATG GTCAGGCTGG GGTACAGCCT GCTCTCGGTG  1320
        TGGGCCTATG ATCTAGGCTC TCGCCTCTTC CAGGAGAAGA TACAAATCCA CAAGAAACAA  1380
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        CTCTCTTGAG CACTTCCCTG GAGCTACCAC GTATCTAGCT AATATGTATG TGTCAGTAGT  1500
   30   AGGCTCCAAG GATTGACAAA TATATTTATG ATCTATTCAG CTGCTTTTAC TGTGTGGATT  1560
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        ATGGTGGAAA ATTACTGAAA CTATTTTACT GTGAAACAGT GTGAACTATT ATAATGCAAA  1680
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   35   Seq ID NO: C120 DNA Sequence
        Nucleic Acid Accession #: NM_052932
        Coding sequence: 217..786

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        GAGCCCACGA GGCTGCCGCA TCCTGCCCTC GGAACAATGG GACTCGGCGC GCGAGGTGCT   240
   45   TGGGCCGCGC TGCTCCTGGG GACGCTGCAG GTGCTAGCGC TGCTGGGGGC CGCCCATGAA   300
        AGCGCAGCCA TGGCGGAGAC TCTCCAACAT GTGCCTTCTG ACCATACAAA TGAAACTTCC   360
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        ACTTCTACCA CCTTAAAGTC TACACCCAAA ACAACAAGTG TTTCACAGAA CACATCTCAG   540
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        AGCTTTGTTG GTGGTATTGT ATTAACGCTG GGAGTTTTAT CTATTCTTTA CATTGGATGC   720
        AAAATGTATT ACTCAAGAAG AGGCATTCGG TATCGAACCA TAGATGAACA TGATGCCATC   780
        ATTTAAGGAA ATCCATGGAC CAAGGATGGA ATACAGATTG ATGCTGCCCT ATCAATTAAT   840
   55   TTTGGTTTAT TAATAGTTTA AAACAATATT CTCTTTTTGA AAATAGTATA AACAGGCCAT   900
        GCATATAATG TACAGTGTAT TACGTAAATA TGTAAAGATT CTTCAAGGTA ACAAGGGTTT   960
        GGGTTTTGAA ATAAACATCT GGATCTTATA GACCGTTCAT ACAATGGTTT TAGCAAGTTC  1020
        ATAGTAAGAC AAACAAGTCC TATCTTTTTT TTTTGGCTG GGGTGGGGGC ATTGGTCACA  1080
        TATGACCAGT AATTGAAAGA CGTCATCACT GAAAGACAGA ATGCCATCTG GGCATACAAA  1140
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        TCAGTGCTTT TCAGAGCTGG ATATATCTTA ATTACTAATG CCACACAGAA ATTATACAAT  1260
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        AACCTGCAGG ATGAAAATGC TATATTTTCT TTCATGCACT GTCGATATTA CTCAGATTTG  1920
        GGGAAATGAC ATTTTTATAC TAAAACAAAC ACCAAAATAT TTTAGAATAA ATTCTTAGAA  1980
        AGTTTTGAGA GGAATTTTTA GAGAGGACAT TTCCTCCTTC CTGATTTGGA TATTCCCTCA  2040
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        CAGTTTCTGA AGGTCCTAAA AATAGCTCAG ATGTCCTAAT GAACATGCAC CTACATTTAA  2340
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        GGAAATTTTC TGAAAAATAC ATTTAGATTA GTTTAGTTTG AAGGAGAGGT GGGCTGATGG  2580
        CTGAGTTGTA TGTTACTAAC TTGGCCCTGA CTGGTTGTGC AACCATTGCT TCATTTCTTT  2640
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Seq ID NO: C121 DNA Sequence
Nucleic Acid Accession #: NM_004195
Coding sequence: 1..726

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TACCCGGGCG AGGAGTGCTG TTCCGAGTGG GACTGCATGT GTGTCCAGCC TGAATTCCAC    240
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TCCGGGGGCC ACGAAGGCCA CTGCAAACCT TGGACAGACT GCACCCAGTT CGGGTTTCTC    420
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Seq ID NO: C122 DNA Sequence
Nucleic Acid Accession #: AK091896.1
Coding sequence: 28..1572

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CAGATCTCCT GGGTCTTCTT CTCGCAGCAG CTCTGCCTCC TGCTGGGCAG CGCCCTCGGG    240
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Seq ID NO: C123 DNA Sequence
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1279

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  5       AAACTTCAGA GTCCTCATTA TAAAATGGGA AGACTGAGCT GGAGTTCAGC AGTGATGCTT   5280
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          Seq ID NO: C124 DNA Sequence
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          CTCGCCTACC TGGCTTACCT GGCGCTGGGC ACCGGCCGTGT TCTGGACGCT GGAGGGCCGC  240
          GCGGCGCAGG ACTCCAGCCG CAGCTTCCAG CGCGACAAGT GGGAGCTGTT GCAGAACTTC  300
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  25      GGGGGCACCT GGCAGGATCC TGACAAGGCG CGGTGGCTGG CGGGCTCTGG CGCCCTCCTC  660
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     CCACTGCCCC TGCTCGCCTA TCTGCTGGCA CTGGCGGGCTC CTGGCGGACGAG   360
     CCCGTGTGGC GGTCGGAGCA AGCCATCGGA GCCATCGCGG CGAGCCAGGA GGACGGCGTG   420
     TTTGTGGCGA GCGGCAGCTG CCTGGACCAG CTGGACTACA GCCTGGAGCA CAGCCTCTCG   480
     CGCCTGTACC GGGACCAAGC GGGCAACTGC ACAGAGCCGG TCTCGCTGGC GCCCCCCGCG   540
     CGGCCCCGGC CCGGGAGCAG CTTCAGCAAG CTGCTGCTGC CCTACCGCGA GGGGGCGGCC   600
     GGCCTCGGGG GGCTGCTGCT CACCGGCTGG ACCTTCGACC GGGGCGCCTG CGAGGTGCGG   660
     CCCCTGGGCA ACCTGAGCCG CAACTCCCTG CGCAACGGCA CCGAGGTGGT GTCGTGCCAC   720
     CCGCAGGGCT CGACGGCCGG CGTGGTGTAC CGCGCGGGCC GGAACAACCG CTGGTACCTG   780
     GCGGTGGCCG CCACCTACGT GCTGCCCTGAG CCGGAGACGG CGAGCCGCTG CAACCCCCGCG   840
     GCATCCGACC ACGACACGGC CATCGCGCTC AAGGACACGG AGGGGCGCAG CCTGGCCACG   900
     CAGGAGCTGG GGCGCCTCAA GCTGTGCGAG GGCGCGGGCA GCCTGCACTT CGTGGACGCC   960
     TTTCTCTGGA ACGGCAGCAT CTACTTCCCC TACTACCCCT ACAACTATAC GAGCGGCGCT  1020
     GCCACCGGCT GGCCCAGCAT GGCGCGCATC GCGCAGAGCA CCGAGGTGCT GTTCCAGGGC  1080
     CAGGCATCCC TCGACTGCGG CCACGGCCAC CCCGACGGCC CGACGGCC CCTCTCCTCC  1140
     AGCCTAGTGG AGGCCCTGGA CGTCTGGGCG GGAGTGTTCA GCGCGGCCGC TGGAGAGGGC  1200
     CAGGAGCGGC GCTCCCCCAC CACCACGGCG CTCTGCCTCT TCAGAATGAG TGAGATCCAG  1260
     GCGCGCGCCA AGAGGGTCAG CTGGGACTTC AAGACGGCCG AGAGCCACTG CAAAGAAGGG  1320
     GATCAACCTG AAAGAGTCCA ACCAATCGCA TCATCTACCT TGATCCATTC CGACCTGACA  1380
     TCCGTTTATG GCACCGTGGT AATGAACAGG ACTGTTTTAT TCTTGGGGAC TGGAGATGGC  1440
     CAGTTACTTA AGGTTATTCT TGGTGAGAAT TTGACTTCAA ATTGTCCAGA GGTTATCTAT  1500
     GAAATTAAAG AAGAGACACC TGTTTTCTAC AAACTCGTTC CTGATCCTGT GAAGAATATC  1560
     TACATTTATC TAACAGCTGG GAAAGAGGTG AGGAGAATTC GTGTTGCAAA CTGCAATAAA  1620
     CATAAATCCT GTTCGGAGTG TTTAACAGCC ACAGACCCTC ACTGCGGTTG GTGCCATTCG  1680
     CTACAAAGGT GCACTTTTCA AGGAGATTGT GTACATTCAG AGAACTTAGA AAACTGGCTG  1740
     GATATTTCGT CTGGAGCAAA AAAGTGCCCT AAAATTCAGA TAATTCGAAG CAGTAAAGAA  1800
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AAGACTACAG TGACTATGGT GGGAAGCTTC TCTCCAAGAC ACTCAAAGTG CATGGTGAAG    1860
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TGTAGCATCC CAACCAGAGC AACCTACAAA GATGTTTCAG TTGTCAACGT GATGTTCTCC    1980
TTCGGTTCTT GGAATTTATC AGACAGATTC AACTTTACCA ACTGCTCATC ATTAAAAGAA    2040
TGCCCAGCAT GCGTAGAAAC TGGCTGCGCG TGGTGTAAAA GTGCAAGAAG GTGTATCCAC    2100
CCCTTCACAG CTTGCGACCC TTCTGATTAT GAGAGAAACC AGGAACAGTG TCCAGTGGCT    2160
GTCGAGAAGA CATCAGGAGG AGGAAGACCC AAGGAGAACA AGGGGAACAG AACCAACCAG    2220
GCTTTACAGG TCTTCTACAT TAAGTCCATT GAGCCACAGA AAGTATCGAC ATTAGGGAAA    2280
AGCAACGTGA TAGTAACGGG AGCAAACTTT ACCCGGGCAT CGAACATCAC AATGATCCTG    2340
AAAGGAACCA GTACCTGTGA TAAGGATGTG ATACAGGTTA GCCATGTGCT AAATGACACC    2400
CACATGAAAT TCTCTCTTCC ATCAAGCCGG AAAGAAATGA AGGATGTGTG TATCCAGTTT    2460
GATGGTGGGA ACTGCTCTTC TGTGGGATCC TTATCCTACA TTGCTCTGCC ACATTGTTCC    2520
CTTATATTTC CTGCTACCAC CTGGATCAGT GGTGGTCAAA ATATAACCAT GATGGGCAGA    2580
AATTTTGATG TAATTGACAA CTTAATCATT TCACATGAAT TAAAAGGAAA CATAAATGTC    2640
TCTGAATATT GTGTGGCGAC TTACTGCGGG TTTTTAGCCC CCAGTTTAAA GAGTTCAAAA    2700
GTGCGCACGA ATGTCACTGT GAAGCTGAGA GTACAAGACA CCTACTTGGA TTGTGGAACC    2760
CTGCAGTATC GGGAGGACCC CAGATTCACG GGGTATCGGG TGGAATCCGA GGTGGACACA    2820
GAACTGGAAG TGAAAATTCA AAAAGAAAAT GACAACTTCA ATATTTCCAA AAAAGACATT    2880
GAAATTACTC TCTTCCATGG GGAAAATGGG CAATTAAATT GCAGTTTTGA AAATATTACT    2940
AGAAATCAAG ATCTTACCAC CATCCTTTGC AAAAATTAAAG GCATCAAGAC TGCAAGCACC    3000
ATTGCCAACT CTTCTAAGAA AGTTCGGGTC AAGCTGGGAA ACCTGGAGCT CTACGTCGAG    3060
CAGGAGTCAG TTCCTTCCAC ATGGTATTTT CTGATTGTGC TCCCTGTCTT GCTAGTGATT    3120
GTCATTTTTG CGGCCGTGGG GGTGACCAGG CACAAATCGA AGGAGCTGAG TCGCAAACAG    3180
AGTCAACAAC TAGAATTGCT GGAAAGCGAG CTCCGGAAAG AGATACGTGA CGGCTTTGCT    3240
GAGCTGCAGA TGGATAAAAT TGGATGTGGTT GATAGTTTTG GAACTGTTCC CTTCCTTGAC    3300
TACAAACATT TTGCTCTGAG AACTTTCTTC CCTGAGTCAG GTGGCTTCAC CCACATCTTC    3360
ACTGAAGATA TGCATAACAG AGACGCCAAC GACAAGAATG AAAGTCTCAC AGCTTTGGAT    3420
GCCCTAATCT GTAATAAAAG CTTTCTTGTT ACTGTCATCC ACACCCTTGA AAAGCAGAAG    3480
AACTTTTCTG TGAAGGACAG GTGTCTGTTT GCCTCCTTCC TAACCATTGC ACTGCAAACC    3540
AAGCTGGTCT ACCTGACCAG CATCCTAGAG GTGCTGACCA GGGACTTGAT GGAACAGTGT    3600
AGTAACATGC AGCCGAAACT CATGCTGAGA CGCACGGAGT CCGTCGTCGA AAAACTCCTC    3660
ACAAACTGGA TGTCCGTCTG CCTTTCTGGA TTTCTCCGGG AGACTGTCGG AGAGCCCTTC    3720
TATTTGCTGG TGACGACTCT GAACCAGAAA ATTAACAAGG GTCCCGTGGA TGTAATCACT    3780
TGCAAAGCCC TGTACACACT TAATGAAGAC TGGCTGTTGT GGCAGGTTCC GGAATTCAGT    3840
ACTGTGGCAT TAAACGTCGT CTTTGAAAAA ATCCCGAAA ACGAGAGTGC AGATGTCTGT    3900
CGGAATATTT CAGTCAATGT TCTCGACTGT GACACCATTG GCCAAGCCAA AGAAAAGATT    3960
TTCCAAGCAT TCTTAAGCAA AAATGGCTCT CCTTATGGAC TTCAGCTTAA TGAAATTGGT    4020
CTTGAGCTTC AAATGGGCAC ACGACAGAAA GAACTTCTGG ACATCGACAG TTCCTCCGTG    4080
ATTCTTGAAG ATGGAATCAC CAAGCTAAAC ACCATTGGCC ACTATGAGAT ATCAAATGGA    4140
TCCACTATAA AAGTCTTTAA GAAGATAGCA AATTTTACTT CAGATGTGGA GTACTCGGAT    4200
GACCACTGCC ATTTGATTTT ACCAGATTCG GAAGCATTCC AAGATGTGCA AGGAAAGAGA    4260
CATCGAGGGA AGCACAAGTT CAAAGTGAAA GAAATGTATC TGACAAAGCT GCTGTCGACC    4320
AAGGTGGCAA TTCATTCTGT GCTTGAAAAA CTTTTTAGAA GCATTTGGAG TTTACCCAAC    4380
AGCAGAGCTC CATTTGCTAT AAAATACTTT TTTGACTTTT TGGACGCCCA GGCTGAAAAC    4440
AAAAAAATCA CAGATCCTGA CGTCGTACAT ATTTGGAAAA CAAACGCCT TCCTCTTCGC    4500
TTCTGGGTAA ACATCCTGAA GAACCCTCAG TTTGTCTTTG ACATTAAGAA GACACCACAT    4560
ATAGACGGCT GTTTGTCAGT GATTGCCCAG GCATTCATGG ATGCATTTTC TCTCACAGAG    4620
CAGCAACTAG GGAAGGAAGC ACCAACTAAT AAGCTTCTCT ATGCCAAGGA TATCCCAACC    4680
TACAAAGAAG AAGTAAAATC TTATTACAAA GCAATCAGGG ATTTGCCTCC ATTGTCATCC    4740
TCAGAAATGG AAGAATTTTT AACTCAGGAA TCTAAGAAAC ATGAAAATGA ATTTAATGAA    4800
GAAGTGGCCT TGACAGAAAT TTACAAATAC ATCGTAAAAT ATTTTGATGA GATTCTAAAT    4860
AAACTAGAAA GAGAACGAGG GCTGGAAGAA GCTCAGAAAC AACTCTTGCA TGTAAAAGTC    4920
TTATTTGATG AAAAGAAGAA ATGCAAGTGG ATGTAAGCAC TCTGGGGCCT GGCTTAATCT    4980
GGCAAAGTTC TTCAGACGAC TTGGGAGCAA AATGGCTGCT TGAGCTACTC TGTGTCGTTA    5040
ATTTGTTGTT TGCACATAGG TTCCACTTTG GGCACTGTCT TTTTAAGAGA CCAAGGCACA    5100
TGCACAGCTT TTAGAAAGCA A                                             5121
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Seq ID NO: C128 DNA Sequence
Nucleic Acid Accession #: NM_002185.1
Coding sequence: 23..1402

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TTTACTTCAA GTCGTTTCTG GAGAAAGTGG CTATGCTCAA AATGGAGACT TGGAAGATGC    120
AGAACTGGAT GACTACTCAT TCTCATGCTA TAGCCAGTTG GAAGTGAATG GATCGCAGCA    180
TTCACTGACC TGTGCTTTTG AGGACCCAGA TGTCAACACC ACCAATCTGG AATTTGAAAT    240
ATGTGGGGCC CTCGTGGAGG TAAAGTGCCT GAATTTCAGG AAACTACAAG AGATATATTT    300
CATCGAGACA AAGAAATTCT TACTGATTGG AAAGAGCAAT ATATGTGTGA AGGTTGGAGA    360
AAAGAGTCTA ACCTGCAAAA AAATAGACCT AACCACTATA GTTAAACCTG AGGGCTCCTTT    420
TGACCTGAGT GTCATCTATC GGGAAGGAGC CAATGACTTT GTGGTGACAT TTAATACATC    480
ACACTTGCAA AAGAAGTATG TAAAAGTTTT AATGCATGAT GTAGCTTACC GCCAGGAAAA    540
GGATGAAAAC AAATGGACGC ATGTGAATTT ATCCAGCACA AAGCTGACAC TCCTGCAGAG    600
AAAGCTCCAA CCGGCAGCAA TGTATGAGAT TAAAGTTCGA TCCATCCCTG ATCACTATTT    660
TAAAGGCTTC TGGAGTGAAT GGAGTCCAAG TTATTACTTC AGAACTCCAG AGATCAATAA    720
TAGCTCAGGG GAGATGGGATC CTATCTTACT AACCATCAGC ATTTTGAGTT TTTTCTCTGT    780
CGCTCTGTTG GTCATCTTGG CCTGTGTGTT ATGGAAAAAA AGGATTAAGC CTATCGTATG    840
GCCCAGTCTC CCCGATCATA AGAAGACTCT GGAACATCTT TGTAAGAAAC CAAGAAAAAA    900
TTTAAATGTG AGTTTCAATC CTGAAAGTTT CCTGGACTGC CAGATTCATA GGGTGGATGA    960
CATTCAAGCT AGAGATGAAG TGGAAGGTTT TCTGCAAGAT ACGTTTCCTC AGCAACTAGA    1020
AGAATCGAG AAGCAGAGGC TTGGAGGGGA TGTGCAGAGC CCCAACTGCC CATCTGAGGA    1080
TGTAGTCGTC ACTCCAGAAA GCTTTGGAAG AGATTCATCC CTCACATGCC TGGCTGGGAA    1140
TGTCAGTGCA TGTGACGCCC CTATTCTCTC CTCTTCCAGG TCCCTAGACT GCAGGGAGAG    1200
TGGCAAGAAT GGGCCTCATG TGTACCAGGA CCTCCTGCTT AGCCTTGCTT CTACAAACAG    1260
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1282

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CACGCTGCCC CCTCCATTTT CTCTCCAATC TGGAATCCTG ACATTGAACC CAGTTGCTCA   1320
GGGTCAGCCC ATTCTTACTT CCCTGGGATC AAATCAAGAA GAAGCATATG TCACCATGTC   1380
CAGCTTCTAC CAAAACCAGT GAAGTGTAAG AAACCCAGAC TGAACTTACC GTGAGCGACA   1440
AAGATGATTT AAAAGGGAAG TCTAGAGTTC CTAGTCTCCC TCACAGCACA GAGAAGACAA   1500
AATTAGCAAA ACCCCACTAC ACAGTCTGCA AGATTCTGAA ACATTGCTTT GACCACTCTT   1560
CCTGAGTTCA GTGGCACTCA ACATGAGTCA AGAGCATCCT GCTTCTACCA TGTGGATTTG   1620
GTCACAAGGT TTAAGGTGAC CCAATGATTC AGCTATTT                           1658
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Seq ID NO: C129 DNA Sequence
Nucleic Acid Accession #: NM_002722.1
Coding sequence: 15..302

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ACTCTGGACT CCGGATGGCT GCCGCACGCC TCTGCCTCTC CCTGCTGCTC CTGTCCACCT   60
GCGTGGCTCT GTTACTACAG CCACTGCTGG GTGCCCAGGG AGCCCCACTG GAGCCAGTGT   120
ACCCAGGGGA CAATGCCACA CCAGAGCAGA TGGCCCAGTA TGCAGCTGAT CTCCGTAGAT   180
ACATCAACAT GCTGACCAGG CCTAGGTATG GGAAAAGACA CAAAGAGGAC ACGCTGGCCT   240
TCTCGGAGTG GGGGTCCCCG CATGCTGCTG TCCCCAGGGA GCTCAGCCCG CTGGACTTAT   300
AATGCCACCT TCTGTCTCCT ACGACTCCAT GAGCAGCGCC AGCCCAGCTC TCCCCTCTGC   360
ACCCTTGGCT CTGGCCAAAG CTTGCTCCCT GCTCCCACAC AGGCTCAATA AAGCAAGTCA   420
AAGCC                                                              425
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Seq ID NO: C130 DNA Sequence
Nucleic Acid Accession #: NM_032545.1
Coding sequence: 47..718

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AAACTGATCT TCAATGCACT AAGAGAAGGA GACTCTCAAA CCAAAAATGA CCTGGAGGCA   60
CCATGTCAGG CTTCTGTTTA CGGTCAGTTT GGCATTACAG ATCATCAATT TGGGAAACAG   120
CTATCAAAGA GAGAAACATA ACGGCGGTAG AGAGGAAGTC ACCAAGGTTG CCACTCAGAA   180
GCACCGACAG TCACCGCTCA ACTGGACCTC CAGTCATTTC GGAGAGGTGA CTGGGAGCGC   240
CGAGGGCTGG GGGCCGGAGG AGCCGCTCCC CTACTCCCGG GCTTTCGGAG AGGGTGCGTC   300
CGCGCGGCCG CGCTGCTGCA GGAACGGCGG TACCTGCGTG CTGGGCAGCT TCTGCGTGTG   360
CCCGGCCCAC TTCACCGGCC GCTACTGCGA GCATGACCAG AGGCGCAGTG AATGCGGCGC   420
CCTGGAGCAC GGAGCCTGGA CCCTCCGCGC CTGCCACCTC TGCAGGTGCA TCTTCGGGGC   480
CCTGCACTGC CTCCCCCTCC AGACGCCTGA CCGCTGTGAC CCGAAAGACT TCCTGGCCTC   540
CCACGCTCAC GGGCCGAGCG CCGGGGGCGC GCCCAGCCTG CTACTCTTGC TGCCCTGCGC   600
ACTCCTGCAC CGCCTCCTGC GCCCGGATGC GCCCGCGCAC CCTCGGTCCC TGGTCCCTTC   660
CGTCCTCCAG CGGGAGCGGC GCCCCTGCGG AAGGCCGGGA CTTGGGCATC GCCTTTAATT   720
TTCTATGTTG TAAATAATAG ATGTGTTTAG TTTACCGTAA GCTGAAGCAC TGGGTGAATA   780
TTTTTATTGG GTAATAAATA TTTTCATGAA AGCGCCAAAA AAAAAAAAAA AAAAAAAAAA   840
AAAAAA                                                             846
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Seq ID NO: C131 DNA Sequence
Nucleic Acid Accession #: NM_006533.1
Coding sequence: 72..467

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CACAGTCCAC GATGGCCCGG TCCCTGGTGT GCCTTGGTGT CATCATCTTG CTGTCTGCCT   120
TCTCCGGACC TGGTGTCAGG GGTGGTCCTA TGCCCAAGCT GGCTGACCGG AAGCTGTGTG   180
CGGACCAGGA GTGCAGCCAC CCTATCTCCA TGGCTGTGGC CCTTCAGGAC TACATGGCCC   240
CCGACTGCCG ATTCCTGACC ATTCACCGGG GCCAAGTGGT GTATGTCTTC TCCAAGCTGA   300
AGGGCCGTGG GCGGCTCTTC TGGGGAGGCA GCGTTCAGGG AGATTACTAT GGAGATCTGG   360
CTGCTCGCCT GGGCTATTTC CCCAGTAGCA TTGTCCGAGA GGACCAGACC CTGAAACCTG   420
GCAAAGTCGA TGTGAAGACA GACAAATGGG ATTTCTACTG CCAGTGAGCT CAGCCTACCG   480
CTGGCCCTGC CGTTTCCCCT CCTTGGGTTT ATGCAAATAC AATCAGCCCA GTGCAAAC   538
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Seq ID NO: C132 DNA Sequence
Nucleic Acid Accession #: AB064272
Coding sequence: 1..708

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ATGACACAAG TCACAGAAAA GTCCACAGAA CACCCAGAAA AGACCACGTC AACCACAGAG   60
AAAACCACAA GAACCCCAGA AAAGCCTACG CTATACTCAG AGAAGACCAT ATGCACCAAA   120
GGGAAAAACA CACCAGTCCC AGAAAAGCCT ACAGAAAACC TGGGGAACAC CACACTGACC   180
ACTGAGACCA TAAAAGCCCC AGTAAAGTCC ACAGAAAACC CAGAAAAAAC AGCAGCAGTC   240
ACAAAGACTA TAAAACCTTC AGTCAAGGTC ACAGGAGACA AATCTCTCAC TACTACCTCT   300
TCTCATCTAA ATAAAACTGA AGTTACTCAT CAGGTGCCCA CTGGTTCTTT CACCCTCATT   360
ACATCTAGAA CGAAGCTGAG TTCTATCACA TCAGAAGCCA CAGGAAACGA GAGCCATCCA   420
TACCTCAATA AAGATGGCTC ACAGAAAGGT ATCCACGCTG GACAGATGGG AGAGAATGAT   480
TCATTCCCTG CATGGGCCAT AGTTATTGTG GTCCTGGTGG CTGTGATTCT CCTCCTGGTG   540
TTCCTTGGCC TGATCTTCTT GGTCTCCTAT ATGATGCGGA CACGCCGCAC ACTAACCCAG   600
AACACCCAGT ACAATGATGC AGAGGATGAG GGTGGCCCCA ATTCCTACCC GGTCTACCTG   660
ATGGAGCAGC AGAATCTTGG CATGGGCCAG ATCCCTTCCC CACGGTGA             708
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Seq ID NO: C133 DNA Sequence
Nucleic Acid Accession #: NM_080870.1
Coding sequence: 3..710

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     AGAAAACCAC AAGAACCCCA GAAAAGCCTA CGCTATACTC AGAGAAGACC ATATGCACCA   120
     AAGGGAAAAA CACACCAGTC CCAGAAAAGC CTACAGAAAA CCTGGGGAAC ACCACACTGA   180
     CCACTGAGAC CATAAAAGCC CCAGTAAAGT CCACAGAAAA CCCAGAAAAA ACAGCAGCAG   240
     TCACAAAGAC TATAAAACCT TCAGTCAAGG TCACAGGAGA CAAATCTCTC ACTACTACCT   300
     CTTCTCATCT AAATAAAACT GAAGTTACTC ATCAGGTGCC CACTGGTTCT TTCACCCTCA   360
     TTACATCTAG AACGAAGCTG AGTTCTATCA CATCAGAAGC CACAGGGAAC GAGAGCCATC   420
     CATACCTCAA TAAAGATGGC TCACAGAAAG GTATCCACGC TGGACAGATG GGAGAGAATG   480
     ATTCATTCCC TGCATGGGCC ATAGTTATTG TGGTCCTGGT GGCTGTGATT CTCCTCCTGG   540
     TGTTCCTTGG CCTGATCTTC TTGGTCTCCT ATATGATGCG GACACGCCGC ACACTAACCC   600
     AGAACACCCA GTACAATGAT GCAGAGGATG AGGGTGGCCC CAATTCCTAC CCGGTCTACC   660
     TGATGGAGCA GCAGAATCTT GGCATGGGCC AGATCCCTTC CCCACGGTGA TCTTGGAGTA   720
     GGCGCCCAGC CCTGGCTCTT CCATGCTCTG CCCCTTTCCT GGATGAGGAA CCGGACTCAC   780
     AATTTCTATT TCCGGGACTA CAGGAAGGGC AGAGAATACT GACGGTTACC AGTATTAACC   840
     CTTCATCTGT TCTTGAAACT GGTTGGGGAA TGAGGTGATA AGCAAGGAGG GTGTAAGTTT   900
     AGGGGACAAA GAAGAAAGAA TGAATAATAC GAGCAGACAT TCTCTGTAGA AGGTAATGGT   960
     CTGAGAATGA AAAGGTGTTT GATGGACATG TTGTGGGGGC ACCAATGCAG AACACTGCAC  1020
     TGAGTCCTAA AGGAAGGACA GGAGCCTTAT AGGCAATGCC CCAGACTGAC TTGTGAGTGG  1080
     GGTTTATGGG GAAAGGGAGG GACTGAGGGC AGAGTCTCTG GGTTTCAGGA CAGCATTATG  1140
     TTATTTCCAT TCACTATTAC TTAAGAGTTT GTGTGTAAAC AGGCTCATCT CTGAGTTCTC  1200
     AGGACCCTTG CCCCCACCCC CATTTTTTTA ATGAAAAAAA AAAACAAAAA AAACGGATCC  1260
     AAGAAGAAAA GAGAATTTAT TTCCTTCTCC ACTCTCTCCA TGCCCTGGAG AAAAAAAAGT  1320
     CCAGAAGAAA TCATAAATAT CTCTCATCTA CATGGTGCT TCCTCTTCCT CCCAAATCCC    1380
     TTAGTTTTCC TAAATGTCTA CAGTGGACGC CTGTTGGTT TGGCTTGCTG GGTTGTGGGT    1440
     GGACACGCAA GGAGGGGATT TTTATTTGGC CAGCAGTCTC ACCCACTGAT CTCCACCCCA  1500
     GACCTTCCCT GATTGGTGTC TCAGCATTTA TTTTCCTGTC TCTTCCACCA AAAGCCAGCT  1560
     GTAGCTTTAT CTCGTAAAAG TTACCCATCT TCTCTACTGT CCCCATTCTC TCTCCTCCCA  1620
     CCTTCACCCC AGATTCAAGT TTTCCTCCTT GTAGGCATT CATCTGTGTG TGTTTTCTGG    1680
     ATTTTCTCTC TCTCTTCTTA TGGCCATTTC ACCTTATTAC TGATTGGGTA GAGGGGGAAA  1740
     AGGAGAATGA TGATGATAGT TTCCTTCTGT CTATTGACCT TTTTTATAAT AAAGTATAAC  1800
     ATGTT                                                              1805


     Seq ID NO: C134 DNA Sequence
     Nucleic Acid Accession #: FGENESH predicted
     Coding sequence: 1..10674


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     TTTCAGCAGA TGTCCCCGTC GCGCAATTTC AGCTTCCGCC TCTTCCCCGA GACCGCGCCC   120
     GGGGCCCCCG GGAGTATCCG CGCGCCGCCC GCTCCTGGCG ACGAAGCGGC GGGGAGCAGA   180
     GTGGAGCGGC TGGGCCAGGC GTTCCGGCGA CGCGTGCGGC TGCTGCGGGA GCTCAGCGAG   240
     CGCCTGGAGC TTGTCTTCCT GGTGGATGAT TCGTCCAGCG TGGGCGAAGT CAACTTCCGC   300
     AGCGAGCTCA TGTTCGTCCG CAAGCTGCTG TCCGACTTCC CCGTGGTGCC CACGGCCACG   360
     CGCGTGGCCA TCGTGACCTT CTCGTCCAAG AACTACGTGG TGCCGCGCGT CGATTACATC   420
     TCCACCCGCC GCGCGCGCCA GCACAAGTGC GCGCTGCTCC TCCAAGAGAT CCCTGCCATC   480
     TCCTACCGAG GTGGCGGCAC CTACACCAAG GGCGCCTTCC AGCAAGCCGC GCAAATTCTT   540
     CTTCATGCTA GAGAAAACTC AACAAAAGTT GTATTTCTCA TCACTGATGG ATATTCCAAT   600
     GGGGGAGACC CTAGACCAAT TGCAGCGTCA CTGCGAGATT CAGGAGTGGA GATCTTCACT   660
     TTTGGCATAT GGCAAGGGAA CATTCGAGAG CTGAATGACA TGGCTTCCAC CCCAAAGGAG   720
     GAGCACTGTT ACCTGCTACA CAGTTTTGAA GAATTTGAGG CTTTAGCTCG CCGGGCATTG   780
     CATGAAGATC TACCTTCTGG GAGTTTTATT CAAGATGATA TGGTCCACTG CTCCATATCTT  840
     TGTGATGAAG GCAAGGACTG CTGTGACCGA ATGGGAAGCT GCAAATGTGG GACACACACA   900
     GGCCATTTTG AGTGCATCTG TGAAAAGGGG TATTACGGGA AAGGTCTGCA GTATGAATGC   960
     ACAGCTTGCC CATCGGGGAC ATACAAACCT GAAGGCTCAC CAGGAGGAAT CAGCAGTTGC  1020
     ATTCCATGTC CTGATGAAA TCACACCTCT CCACCTGGAA GCACATCCCC TGAAGACTGT    1080
     GTCTGCAGAG AGGGATACAG GGCATCTGGC CAGACCTGTG AACTTGTCCA CTGCCCTGCC  1140
     CTGAAGCCTC CGAAAATGG TTACTTTATC CAAAACACTT GCAACAACCA CTTCAATGCA    1200
     GCCTGTGGGG TCCGATGTCA CCCTGGATTT GATCTTGTGG GAAGCAGCAT CATCTTATGT  1260
     CTACCCAATG GTTTGTGGTC CGGTTCAGAG AGCTACTGCA GAGTAAGAAC ATGTCCTCAT  1320
     CTCCGCCAGC CGAAACATGG CCACATCAGC TGTTCTACAA GGGAAATGTT ATATAAGACA  1380
     ACATGTTTGG TTGCCTGTGA TGAAGGGTAC AGACTAGAAG GCAGTGAATAA GCTTACTTGT  1440
     CAAGGAAACA GCCAGTGGGA TGGGCCAGAA CCCCGGTGTG TGGAGCGCCA CTGTTCCACC  1500
     TTTCAGATGC CCAAAGATGT CATCATATCC CCCCACAACT GTGGCAAGCA GCCAGCCAAA  1560
     TTTGGGACGA TCTGCTATGT AAGTTGCCGC CAAGGGTTCA TTTTATCTGG AGTCAAAGAA  1620
     ATGCTGAGAT GTACCACTTC TGGAAAATGG AATGTCGGAG TTCAGGCAGC TGTGTGTAAA  1680
     GACGTGGAGG CTCCTCAAAT CAACTGTCCT AAGGACATAG AGGCTAAGAC TCTGGAACAG  1740
     CAAGATTCTG CCAATGTTAC CTGGCAGATT CCAACAGCTA AAGACAACTC TGGTGAAAAG  1800
     GTGTCAGTCC ACGTTCATCC AGCTTTCACC CCACCTTACC TTTTCCCAAT TGGAGATGTT  1860
     GCTATCGTAT ACACGGCAAC TGACCTATCC GGCAACCAGG CCAGCTGCAT TTTCCATATC  1920
     AAGGTTATTG ATGCAGAACC ACCTGTCATA GACTGGTGCA GATCTCCACC TCCCGTCCAG  1980
     GTCTCGGAGA AGGTACATGC CGCAAGCTGG GATGAGCCTC AGTTCTCAGA CAACTCAGGG  2040
     GCTGAATTGG TCATTACCAG AAGTCATACA CAAGGAGACC TTTTCCCTCA AGGGGAGACT  2100
     ATAGTACAGT ATACAGCCAC TGACCCCTCA GGCAATAACA GGACATGTGA TATCCCATATT  2160
     GTCATAAAAG GTTCTCCCTG TGAAATTCCA TTCACACCTG TAAATGGGGA TTTTATATGC  2220
     ACTCCAGATA TAACTGGAGT CAACTGTACA TTAACTTGCT TGGAGGGCTA TGATTTCACA  2280
     GAAGGGTCTA CTGACAAGTA TTATTGTGCT TATGAAGATG GCGTCTGGAA ACCAACATAT  2340
     ACCACTGAAT GGCCAGACTG TGCCAAAAAA CGTTTTGCAA ACCACGGGTT CAAGTCCTTT  2400
     GAGATGTTCT ACAAAGCAGC TCGTTGTGAT GACACAGATC TGATGAAGAA GTTTTCTGAA  2460
     GCATTTGAGA CGACCCTGGG AAAAATGGTC CCATCATTTT GTAGTGATGC AGAGGACATT  2520
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Seq ID NO: C135 DNA Sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..390

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CAGTGCTGTT ACAATGACGC CATCGTGTCC CTGAGCGAGA CCCGCCAATG TGGTCCCCCC   240
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Seq ID NO: C136 DNA Sequence
Nucleic Acid Accession #: BC035671.1
Coding sequence: 126..1745

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AAGAACTCTT GTTGAACACA AGTGAAGTAA CCGTCCGCTT TGAGAGTGGA TCCCACATTT   540
CTGGCCGGGG TTTTTTGCTG ACCTATGCGA GCAGCGACCA TCCAGATTTA ATAACATGTT   600
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Seq ID NO: C137 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 1..1761

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Seq ID NO: C138 DNA Sequence
Nucleic Acid Accession #: FGENESH predicted
Coding sequence: 1..2310

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1287

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CAGATGATCT CACAAAGGGA GAATCTGGGA CCTGATGAGG GCAAAATACC TTTTAAAGGC    1560
ACAGCGAAA GCATGGTTAG AGTAGTGTTT GCTGTTGTGG TTAATGACCT TGGCATGCTG     1620
TTCTTAGCAC ACACACCTGA GGAGGACATT GATCACTACT GTTGGAAGCA GATTAAATAT    1680
CCCTTTGCCA GACATCAGTC AGCTGAGTTT ACCATCAGCT ATGATAATGA GAAGGAGATG    1740
ACACAAAAGT TAGATCTCAT CACAAGTGAT ATGGCAGATT ACCAGCAGCC CCTCATGATT    1800
GGCACCGGGA CAGTCACGAG GAAGGGCTCC ACCTTCCGGC CCATGGCACG GGATGCCGAG    1860
GAGGCAGGGG TGAGCACCGA TGCCGGCGGC CACTATGACT GCCCGCAGCG GGCCGGCCGC    1920
CACGAGTACG CGCTGCCCCT GGCGCCCCCG GAGCCCGAGT ACGCCACGCG CATCGTGGAG    1980
CGGCACGTGC TGCGCGCCCA CACGTTCTCT GCGCAGAGCG GCTACCGCGT CCCAGGGCCC    2040
CAGCCCGGCC ACAAACACTC CCTCTCCTCG GGCGGCTTCT CCCCCGTAGC GGGTGTGGGC    2100
GCCCAGGACG GAGACTATCA AAGGCCACAC AGCGCACAGC CTGCGGACAG GGGCTACGAC    2160
CGGCCCAAAG CTGTCAGCGC CCTCGCCACC GAAAGCGGGC ACCCTGACTC TCAGAAGCCC    2220
CCAACGCATC CCGGGACGAG TGACAGCTAT TCTGCCCCCA GAGACTGCCT CACACCCCTC    2280
AACCAGACGG CCATGACTGC CCTTTTGTGA                                     2310
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Seq ID NO: C139 DNA Sequence
Nucleic Acid Accession #: NM_004616.2
Coding sequence: 180..893

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AGTGCCCCAG GAGCTATGAC AAGCAAAGGA ACATACTTGC CTGGAGATAG CCTTTGCGAT    60
ATTTAAATGT CCGTGGATAC AGAAATCTCT GCAGGCAAGT TGCTCCAGAG CATATTGCAG    120
GACAAGCCTG TAACGAATAG TTAAATTCAC GGCATCTGGA TTCCTAATCC TTTTCCGAAA    180
TGGCAGGTGT GAGTGCCTGT ATAAAATATT CTATGTTTAC CTTCAACTTC TTGTTCTGGC    240
TATGTGGTAT CTTGATCCTA GCATTAGCAA TATGGGTACG AGTAAGCAAT GACTCTCAAG    300
CAATTTTTGG TTCTGAAGAT GTAGGCTCTA GCTCCTACGT TGCTGTGGAC ATATTGATTG    360
CTGTAGGTGC CATCATCATG ATTCTGGGCT TCCTGGGATG CTGCGGTGCT ATAAAAGAAA    420
GTCGCTGCAT GCTTCTGTTG TTTTTCATAG GCTTGCTTCT GATCCTGCTC CTGCAGGTGG    480
CGACAGGTAT CCTAGGAGCT GTTTTCAAAT CTAAGTCTGA TCGCATTGTG AATGAAACTC    540
TCTATGAAAA CACAAAGCTT TTGAGCGCCA CAGGGGAAAG TGAAAAACAA TTCCAGGAAG    600
CCATAATTGT GTTCAAGGAA GAGTTTAAAT GCTGCGGTTT GGTCAATGGA GCTGCTGATT    660
GGGGAAATAA TTTTCAACAC TATCCTGAAT TATGTGCCTG TCTAGATAAG CAGAGACCAT    720
GCCAAAGCTA TAATGGAAAA CAAGTTTACA AAGAGACCTG TATTTCTTTC ATAAAAGACT    780
TCTTGGCAAA AAATTTGATT ATAGTTATTG GAATATCATT TGGACTGGCA GTTATTGAGA    840
TACTGGGTTT GGTGTTTTCT ATGGTCCTGT ATTGCCAGAT CGGGAACAAA TGAATCTGTG    900
GATGCATCAA CCTATCGTCA GTCAAACCCC TTTAAAATGT TGCTTTGGCT TTGTAAATTT    960
AAATATGTAA GTGCTATATA AGTCAGGAGC AGCTGTCTTT TTAAAATGTC TCGGCTAGCT   1020
AGACCACAGA TATCTTCTAG ACATATTGAA CACATTTAAG ATTTGAGGGA TATAAGGGAA   1080
AATGATATGA ATGTGTATTT TTACTCAAAA TAAAAGTAAC TGTTTACGTT AAAAAAAAAA   1140
AAAAAAAAAA AAAAAAAA                                                 1159
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Seq ID NO: C140 DNA Sequence
Nucleic Acid Accession #: NM_004617.2
Coding sequence: 232..840

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AGCTGAAGCA ACTCCAAGGA CACAGTTCAC AGAAATTTGG TTCTCAGCCC CAAAATACTG    120
ATTGAATTGG AGACAATTAC AAGGACTCTC TGGCCAAAAA CCCTTGAAGA GGCCCCGTGA    180
AGGAGGCAGT GAGGGAGCTTT TGATTGCTGA CCTGTGTCGT ACCACCCCAG AATGTGCACT    240
GGGGGCTGTG CCAGATGCCT GGGGGGGGACC CTCATTCCCC TTGCTTTTTT TGGCTTCCTG    300
GCTAACATCC TGTTATTTTT TCCTGGAGGA AAAGTGATAG ATGACAACGA CCACCTTTCC    360
CAAGAGATCT GGTTTTTCGG AGGAATATTA GGAAGCGGTG TCTTGATGAT CTTCCCTGCG    420
CTGGTGTTCT TGGGCCTGAA GAACAATGAC TGCTGTGGGT GCTGCGGCAA CGAGGGCTGT    480
GGGAAGCGAT TTGCGATGTT CACCTCCACG ATATTTGCTG TGGTTGGATT CTTGGGGAGCT    540
GGATACTCGT TTATCATCTC AGCCATTTCA ATCAACAAGG GTCCTAAATG CCTCATGGCC    600
AATAGTACAT GGGGCTACCC CTTCCACGAC GGGGATTATC TCAATGATGA GGCCTTATGG    660
AACAAGTGCC GAGAGCCTCT CAATGTGGTT CCCTGGAATC TGACCCTCTT CTCCATCCTG    720
CTGGTCGTAG GAGGAATCCA GATGGTTCTC TGCGCCATCC AGGTGGTCAA TGGCCTCCTG    780
GGGACCCTCT GTGGGGACTG CCAGTGTTGT GGCTGCTGTG GGGGAGATGG ACCCGTTTAA    840
ACCTCCGAGA TGAGCTGCTC AGACTCTACA GCATGACGAC TACAATTTCT TTTCATAAAA    900
CTTCTTCTCT TCTTGGAATT ATTAATTCCT ATCTGCTTCC TAGCTGATAA AGCTTAGAAA    960
AGGCAGTTAT TCCTTCTTTC CAACCAGCTT TGCTCGAGTT AGAATTTTGT TATTTTCAAA   1020
TAAAAAATAG TTTGGCCACT TAACAAATTT GATTTATAAA TCTTTCAAAT TAGTTCCTTT   1080
TTAGAATTTA CCAACAGGTT CAAAGCATAC TTTTCATGAT TTTTTTATTA CAAATGTAAA   1140
ATGTATAAAG TCACATGTAC TGCCATACTA CTTCTTTGTA TATAAAGATG TTTATATCTT   1200
TGGAAGTTTT ACATAAATCA AAGGAAGAAA GCACATTTAA AATGAGAAAC TAAGACCAAT   1260
TTCTGTTTTT AAGAGGAAAA AGAATGATTG ATGTATCCTA AGTATTGTTA TTTGTTGTCT   1320
TTTTTTGCTG CCTTGCTTGA GTTGCTTGTG ACTGATCTTT TGAGGCTGTC ATCATGGCTA   1380
GGGTTCTTTT ATGTATGTTA AATTAAAACC TGAATTCAGA GGTAACGT              1428
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Seq ID NO: C141 DNA Sequence
Nucleic Acid Accession #: NM_002381.2

Coding sequence: 64..1524

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ACCATGCCGC GCCCGGCCCC CGCGCGCCGC CTCCCGGGAC TCCTCCTGCT GCTCTGGCCG   120
CTGCTGCTGC TGCCCTCCGC CGCCCCCGAC CCCGTGGCCC GCCCGGGCTT CCGGAGGCTG   180
GAGACCCGAG GTCCCGGGGG CAGCCCTGGA CGCCGCCCCT CTCCTGCGGC TCCCGACGGC   240
GCGCCGCTT CCGGGACCAG CGAGCCTGGC CGCGCCCGCG GTGCAGGTGT TTGCAAGAGC   300
AGACCCTTGG ACCTGGTGTT TATCATTGAT AGTTCTCGTA GCGTACGGCC CCTGGAATTC   360
ACCAAAGTGA AAACTTTTGT CTCCCGGATA ATCGACACTC TGGACATTGG GCCAGCCGAC   420
ACGCGGGTGG CAGTGGTGAA CTATGCTAGC ACTGTGAAGA TCGAGTTCCA ACTCCAGGCC   480
TACACAGATA AGCAGTCCCT GAAGCAGGCT GTGGGTCGAA TCACACCCTT GTCAACAGGC   540
ACCATGTCAG GCCTAGCCAT CCAGACAGCA ATGGACGAAG CCTTCACAGT GGAGGCAGGG   600
GCTCGAGAGC CCTCTTCTAA CATCCCTAAG GTGGCCATCA TTGTTACAGA TGGGAGGCCC   660
CAGGACCAGG TGAATGAAGT GGCGGCTCGG CGCCAAGCAT CTGGTATTGA GCTCTATGCT   720
GTGGGCGTGG ACCGGGCAGA CATGGCGTCC CTCAAGATGA TGGCCAGTGA GCCCCTAGAG   780
GAGCATGTTT CTACGTGGA GACCTATGGG GTCATTGAGA AACTTTCCTC TAGATTCCAG   840
GAAACCTTCT GTGCGCTGGA CCCCTGTGTG CTTGGAACAC ACCAGTGCCA GCACGTCTGC   900
ATCAGTGATG GGGAAGGCAA GCACCACTGT GAGTGTAGCC AAGGATACAC CTTGAATGCC   960
GACAAGAAAA CGTGTTCAGC TCTTGATAGG TGTGCTCTTA ACACCCACGG ATGTGAGCAC  1020
ATCTGTGTGA ATGACAGAAG TGGCTCTTAT CATTGTGAGT GCTATGAAGG TTATACCTTG  1080
AATGAAGACA GGAAAACTTG TTCAGCTCAA GATAAATGTG CTTTGGGTAC CCATGGGTGT  1140
CAGCACATTT GTGTGAATGA CAGAACAGGG TCCCATCATT GTGAATGCTA TGAGGGCTAC  1200
ACTCTGAATG CAGATAAAAA AACATGTTCA GTCCGTGACA AGTGTGCCCT AGGCTCTCAT  1260
GGTTGCCAGC ACATTTGTGT GAGTGATGGG GCGGCATCCT ACCACTGTGA TTGCTATCCT  1320
GGCTACACCT TAAATGAGGA CAAGAAAACA TGTTCAGCCA CTGAGGAAGC ACGAAGACTT  1380
GTTTCCACTG AAGATGCTTG TGGATGTGAA GCTACACTGG CATTCCAGGA CAAGGTCAGC  1440
TCGTATCTTC AAAGACTGAA CACTAAACTT GATGACATTT TGGAGAAGTT GAAAATAAAT  1500
GAATATGGAC AAATACATCG TTAAATTGCT CCAATTTCTC ACCTGAAAAT GTGGACAGCT  1560
TGGTGTACTT AATACTCATG CATTCTTTTG CACACCTGTT ATTGCCAATG TTCCTGCTAA  1620
TAATTTGCCA TTATCTGTAT TAATGCTTGA ATATTACTGG ATAAATTGTA TGAAGATCTT  1680
CTGCAGAATC AGCATGGATT TTCCAAGGAA ATACATATGC AGATACTTAT TAAGAGCAAA  1740
CTTTAGTGTC TCTAAGTTAT GACTGTGAAA TGATTGGTAG GAAATAGAAT GAAAAGTTTA  1800
GTGTTTCTTT ATCTACTAAT TGAGCCATTT AATTTTTAAA TGTTTATATT AGATAACCAT  1860
ATTCACAATG GAAACTTTAG GTCTAGTTTC TTTTGATAGT ATTTATAATA TAAATCAATC  1920
TTATTACTGA GAGTGCAAAT TGTACAAGGT ATTTACACAT ACAACTTCAT ATAACTGAGA  1980
TGAATGTAAT TTTGAACTGT TTAACACTTT TTGTTTTTTG CTTATTTTGT TGGAGTATTA  2040
TTGAAGATGT GATCAATAGA TTGTAATACA CATATCTAAA AATAGTTAAC ACAGATCAAG  2100
TGAACATTAC ATTGCCATTT TTAATTCATT CTGGTCTTTG AAAGAAATGT ACTACTAAAG  2160
AGCACTAGTT GTGAATTTAG GGTGTTAAAC TTTTTACCAA GTACAAAAAT CCCAAATTCA  2220
CTTTATTATT TTGCTTCAGG ATCCAAGTGA CAAAGTTATA TATTTATAAA ATTGCTATAA  2280
ATCGACAAAA TCTAATGTTG TCTTTTTAAT GTTAGTGATC CACCTGCCTC AGCCTCCCAA  2340
AGTGCTGGGA TTACAGGCTT GAAAGTCTAA CTTTTTTTTA CTTATATATT TGATACATAT  2400
AATTCTTTTG GCTTTGAAAC TTGCAACTTT GAGAACAAAA CAGTCCTTTA AATTTTGCAC  2460
TGCTCAATTC TGTTTTTCGT TTGCATTGTC TTTAATATAA TAAAAGTTAT TACCTTTACA  2520
TATTATCATG TCTATTTTTG ATGACTCATC AATTTTGTCT ATTAAAGATA TTTCTTTAAA  2580
TTAAAAAAAA AAAAAAAAA                                             2599
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Seq ID NO: C142 DNA Sequence
Nucleic Acid Accession #: NM_016639.1
Coding sequence: 40..429

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CGGTTGCTGC GGCTCCTCGT GCTGGGGCTC TGGCTGGCGT TGCTGCGCTC CGTGGCCGGG   120
GAGCAAGCGC CAGGCACCGC CCCCTGCTCC CGCGGCAGCT CCTGGAGCGC GGACCTGGAC   180
AAGTGCATGG ACTGCGCGTC TTGCAGGGCG CGACCGCACA GCGACTTCTG CCTGGGCTGC   240
GCTGCAGCAC CTCCTGCCCC CTTCCGGCTG CTTTGGCCCA TCCTTGGGGG CGCTCTGAGC   300
CTGACCTTCG TGCTGGGGCT GCTTTCTGGC TTTTTGGTCT GGAGACGATG CCGCAGGAGA   360
GAGAAGTTCA CCACCCCCAT AGAGGAGACC GGCGGAGAGG GCTGCCCAGC TGTGCGCTG   420
ATCCAGTGAC AATGTGCCCC CTGCCAGCCG GGGCTCGCCC ACTCATCATT CATTCATCCA   480
TTCTAGAGCC AGTCTCTGCC TCCCAGACGC GGCGGGAGCC AAGCTCCTCC AACCACAAGG   540
GGGGTGGGGG GCGGTGAATC ACCTCTGAGG CCTGGGCCCA GGGTTCAGGG GAACCTTCCA   600
AGGTGTCTGG TTGCCCTGCC TCTGGCTCCA GAACAGAAAG GGAGGCCTCAC GCTGGCTCAC   660
ACAAAACAGC TGACACTGAC TAAGGAACTG CAGCATTTGC ACAGGGGAGG GGGGTGCCCT   720
CCTTCCTTAG GACCTGGGGG CCAGGCTGAC TTGGGGGGCA GACTTGACAC TAGGCCCCAC   780
TCACTCAGAT GTCCTGAAAT TCCACCACGG GGGTCACCCT GGGGGGTTAG GGACCTATTT   840
TTAACACTAG GGGCTGGCCC ACTAGGAGGG CTGGCCCTAA GATACAGACC CCCCCAACTC   900
CCCAAAGCGG GGAGGAGATA TTTATTTTGG GGAGAGTTTG GAGGGGAGGG AGAATTTATT   960
AATAAAAGAA TCTTTAACTT TAAAAAAAAA AAAAAAA                          998
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Seq ID NO: C143 DNA Sequence
Nucleic Acid Accession #: NM_001819
Coding sequence: 113..2146

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CCAGGAGGCA CGCTGGTTTT CCGGGGCCGC TCCATCGCGC CTTCCTCCTG CGCCTCGCTT    60
CTCCGGTCCA GCCGCCATCT TCCTTTCCGC ACAGGGGCCG CCGAGCGGGG CCATGCAGCC   120
AACGCTGCTT CTCAGCCTCC TGGGAGCCGT GGGGCTGGCG GCTGTCAATT CCATGCCAGT   180
GGATAACAGG AACCACAATG AAGGAATGGT GACTCGCTGC ATCATTGGA TCCTCTCAAA   240
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          TGCCTTGTCG AAGTCCAGCG CTCCACCCAT CACCCCTGAG TGCCGCCAAG TCCTGAAGAC   300
          GAGTAGAAAA GACGTCAAAG ACAAAGAGAC AACTGAAAAT GAAAACACAA AGTTTGAAGT   360
          AAGATTGTTA AGAGACCCAG CTGATGCCTC GGAAGCCCAC GAGTCCTTCCA GCAGGGGAGA   420
     5    GGCAGGAGCC CCAGGGGAGG AGGACATCCA AGGCCCAACA AAGGCAGACA CAGAGAAATG   480
          GGCAGAGGGA GGCGGGCACA GCCGAGAGCG AGCGGGATGAG CCCCAGTGGA GCCTCTATCC   540
          CTCCGACAGC CAAGTCTCTG AAGAAGTGAA GACACGCCAT TCTGACAAGA GCCAGAGAGA   600
          GGATGAGGAG GAGGAGGAGG GAGAGAACTA TCAAAAAGGG GAGCGAGGGG AAGATAGCAG   660
          TGAAGAGAAA CACCTTGAAG AGCCAGGAGA GACACAAAAC GCTTTTCTCA ATGAAAGAAA   720
          GCAGGCTTCA GCTATAAAAA AAGAGGAGTT AGTGGCCAGA TCGGAAACAC ATGCTGCCGG   780
     10   GCATTCTCAG GAGAAGACAC ATAGCCGAGA GAAGAGTAGC CAGGAGAGTG GAGAGGAGGC   840
          AGGGAGCCAG GAGAATCACC CCCAGGAGTC TAAAGGCCAA CCCCGAAGCC AGGAAGAATC   900
          TGAGGAAGGT GAGGAAGATG CCACCTCTGA GGTGGACAAA CGACGCACGA GGCCCAGACA   960
          CCACCACGGG AGGAGCAGGC CCGACAGGTC CTCTCAAGGA GGGAGTCTTC CCTCTGAGGA  1020
     15   AAAGGGACAC CCCCAGGAGG AATCTGAGGA GTCAAACGTC AGCATGGCCA GTTTAGGGGA  1080
          AAAGAGGGAC CACCATTCAA CCCACTACAG GGCTTCAGAG GAAGAACCTG AATATGGAGA  1140
          AGAAATAAAG GGTTATCCAG GCGTCCAGGC CCCTGAGGAC CTGGAGTGGG AGCGCTATAG  1200
          GGGCAGAGGA AGTGAAGAAT ACAGGGCTCC AAGACCTCAG AGTGAGGAGA GTTGGGATGA  1260
          GGAGGACAAG AGAAACTACC CCAGCTTAGA GCTTGATAAG ATGGCACATG GATATGGTGA  1320
          AGAAAGTGAG GAAGAGAGGG GCCTTGAGCC GGGAAAGGGA CGCCATCACA GAGGCAGGGG  1380
     20   AGGGGAGCCA CGTGCCTATT TCATGTCTGA CACCAGAGAA GAGAAAAGGT TCTTGGGTGA  1440
          AGGACACCAC CGTGTCCAAG AAAACCAGAT GGACAAGGCA AGGAGGCATC CACAAGGTGC  1500
          GTGGAAAGAG CTGGACAGAA ATTATCTCAA CTACGGTGAG GAAGGAGCCC CAGGGAAGTG  1560
          GCAGCAGCAG GGAGACCTGC AGGACACTAA AGAAAACAGG GAGGAAGCTA GGTTTCAAGA  1620
          TAAACAATAT AGCTCCCATC ACACAGCTGA AAAGAGGAAG AGATTAGGGG AACTGTTCAA  1680
     25   CCCATACTAC GACCCCTCTCC AGTGGAAGAG CAGCCATTTT GAAAGAAGAG ACAACATGAA  1740
          TGACAATTTT CTCGAGGGTG AGGAGGAAAA TGAGCTGACC TTGAACGAGA AGAATTTCTT  1800
          CCCAGAATAC AACTATGACT GGTGGGAGAA AAAGCCCTTC TCTGAGGATG TGAACTGGGG  1860
          GTATGAAGAG AGAAACCTCG CCAGGGTCCC CAAGCTGGAC CTGAAAAGGC AATATGACAG  1920
     30   GGTGGCCCAA CTGGACCAGC TCCTTCACTA CAGGAAGAAG TCAGCTGAGT TTCCAGACTT  1980
          CTATGATTCT GAGGAGCCGG TGAGCACCCA CCAGGAGGCA GAAAATGAAA AGGACAGGGC  2040
          TGACCAGACA GTCCTGACAG AGGACGAGAA AAAAGAACTC GAAAACTTGG CTGCAATGGA  2100
          TTTGGAACTA CAGAAGATAG CTGAGAAAAT CAGCCAAAGG GGCTGACTGT CATTGGAGCG  2160
          GTGGGCACTG TTAAGAAGCA GCCATCACAT GATCTGTTTT TCACCACTTC ACTGAAAGAC  2220
     35   ACCATTTATA TACCCAAGGG CAGAAAGTAG AACTTACTAT TCATTAAATG TTTGACACAA  2280
          TTGGAATTGT CTTTAATTTC TGTCAGAATG CTATTGAAAA TGTGAATTGC ATGACTTGTA  2340
          GCATATTCTT TTCTGCAAAA TAGACATATT AACATGCTTA TGACAATGAC TGTGCTACTG  2400
          TCTTTGGAAA AATGTTTGTC TCAGTTGGAA ATAATAAAAG ATTCACCTGA GACC         2454
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     40   Seq ID NO: C144 DNA Sequence
          Nucleic Acid Accession #: XM_093082.1
          Coding sequence: 93..1988

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     45   CTTCTTGTGG TAGGGACCTC TCCTCAGTAT TTGAAACTAA CCAGCATCTG ACAGATTTCG    60
          AATTTGTAAA AAATACCCTC GAAGATTCAG GAATGAAGCT TCTGTGTGAA GGATTAAAAC   120
          AGCCCAACTG TGTATTACAG ACATTGAGGT GGTACGGGTG CCTTATCTCT TCTGCTTCTT   180
          GTGGGGCTCT AGCAGCTGTT CTTAGCACCA GTCAGTGGCT CACTGAACTG GAATTTAGTG    240
     50   AGACAAAACT GGAAGCTTCA GCTTTGAAAT TGCTCTATGG AGGCTTAAAA GATCCAAATT   300
          GCAAATTACA GAAGCTCAAC TTGCAGTTTT CTTTATCTGT AACCGCTGCA AAACTTCCAG   360
          TTGGAATGGT TGGAAATTGT TCTGGTTTCT CGGGATCATT GGTGCAATCT CATTTTGGCT   420
          ACTGTCAGGA CAGTTCTTTC AAATGTGATC TTTGTAAGCT GCTCTGGCCT TCCACCAGAG   480
          TTGCTGCTGC AAAGGATTGT GGGAGTCCTA AGTCCTTCCT ATCAGAAGGG CTGAACTGGG   540
     55   CAGGAAGACT TGAGGCAGTG GAGGAGGTTT TGGGGTTGGG GGTGCTTGTA CAGCCCGGTG   600
          ACCCAGCATC TCAGGGTGGG GGCATTGTG AAAACTATGG GTCTTTTAGA GACTTGGTGG   660
          ACTTAGAAGT CAAGGCAGAA CCAAGCCTGA GAAAAGGTGG TATGGATCTC CAGAGACCCA   720
          CCCTACAAGT TGTCCTCCTT TGCAAAATCT TCTCCCTCAA ACTATTTCTC TTTATTGCAT   780
          TGCCTAATTC TCCTGGTCAG GTTAGTGTGG TGCAAGTGAC CATCCCAGAC GGTTTCGTGA   840
     60   ACGTGACTGT TGGATCTAAT GTCACTCTCA TCTGCATCTA CACCACCACT GTGGCCTCCC   900
          GAGAACAGCT TTCCATCCAG TGGTCTTTCT TCCATAAGAA GGAGGATGAG CCAATTTCTT   960
          CTCCTTGGGA GGAGGGGAAG TGGCCAGATG TTGAGGCTGT GAAGGGCACT CTTGATGGAC  1020
          AGCAGGCTGA ACTCCAGATT TACTTTTCTC AAGGTGGACA AGCTGTAGCC ATCGGGCAAT  1080
          TTAAAGATCG AATTACAGGG TCCAACGATC CAGGTAATGC ATCTATCACT ATCTCGCATA  1140
     65   TGCAGCCAGC AGACAGTGGA ATTTACATCT GCGATGTTAA CAACCCCCCA GACTTTCTCG  1200
          GCCAAAACCA AGGCATCCTC AACGTCAGTG TGTTAGTGAA ACCTTCTAAG CCCCTTTGTA  1260
          GCGTTCAAGG AAGACCAGAA ACTGGCCACA CTATTTCCCT TTCCTGTCTC TCTGCGCTTG  1320
          GAACACCTTC CCCTGTGTAC TACTGGCATA AACTTGAGGG AAGAGACATC GTGCCAGTGA  1380
          AAGAAAACTT CAACCCAACC ACCGGGATTT TGGTCATTGG AAATCTGACA AATTTTGAAC  1440
     70   AAGGTTATTA CCAGTGTACT GCCATCAACA GACTTGGCAA TAGTTCCTGC GAAATCGATC  1500
          TCACTTCTTC ACATCCAGAA GTTGGAATCA TTGTTGGGGC CTTGATTGGT AGCCTGGTAG  1560
          GTGCCGCCAT CATCATCTCT GTTGTGTGCT TCGCAAGGAA TAAGGCAAAA GCAAAGGCAA  1620
          AAGAAAGAAA TTCTAAGACC ATCGCGGAAC TTGAGCCAAT GACAAAGATA AACCCAAGGG  1680
          GAGAAAGCGA AGCAATGCCA AGAGAAGACG CTACCCAACT ACTACCATCTT  1740
     75   CCATTCATGA GACTGGCCCT GATACCATCC AAGAACCAGA CTATGAGCCA AAGCCTACTC  1800
          AGGAGCCTGC CCCAGAGCCT GCCCCAGGAT CAGAGCCTAT GGCAGTGCCT GACCTTGACA  1860
          TCGAGCTGGA GCTGGAGCCA GAAACGCAGT CGGAATTGGA GCCAGAGCCA GAGCCAGAGC  1920
          CAGAGTCAGA GCCTGGGGTT GTAGTTGAGC CCTTAAGTGA AGATGAAAAG GGAGTGGTTA  1980
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     80   Seq ID NO: C145 DNA Sequence
          Nucleic Acid Accession #: FGENESH predicted
          Coding sequence: 1..1242

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    ATGGTGTTCG CATTTTGGAA GGTCTTTCTG ATCCTAAGCT GCCTTGCAGG TCAGGTTAGT   60
    GTGGTGCAAG TGACCATCCC AGACGGTTTC GTGAACGTGA CTGTTGGATC TAATGTCACT  120
    CTCATCTGCA TCTACACCAC CACTGTGGCC TCCCGGAAAC AGCTTTCCAT CCAGTGGTCT  180
    TTCTTCCATA AGAAGGAGAT GGAGCCAATT TCTTCTCCTT GGGAGGAGGG GAAGTGGCCA  240
    GATGTTGAGG CTGTGAAGGG CACTCTTGAT GGACAGCAGG CTGAACTCCA GATTTACTTT  300
    TCTCAAGGTG GACAAGCTGT AGCCATCGGG CAATTTAAAG ATCGAATTAC AGGGTCCAAC  360
    GATCCAGGTA ATGCATCTAT CACTATCTCG CATATGCAGC CAGCAGACAG TGGAATTTAC  420
    ATCTGCGATG TTAACAACGTC CCCAGACTTT CTCGGCCAAA ACCAAGGCAT CCTCAACGTC  480
    AGTGTGTTAG TGAAACCTTC TAAGCCCCTT TGTAGCGTTC AAGGAAGACC AGAAACTGGC  540
    CACACTATTT CCCTTTCCTG TCTCTCTGCG CTTGGAACAC CTTCCCCTGT GTACTACTGG  600
    CATAAACTTG AGGGAAGAGA CATCGTGCCA GTGAAAGAAA ACTTCAACCC AACCACCGGG  660
    ATTTTGGTCA TTGGAAATCT GACAAATTTT GAACAAGGTT ATTACCAGTG TACTGCCATC  720
    AACAGACTTG GCAATAGTTC CTGCGAAATC GATCTCACTT CTTCACATCC AGAAGTTGGA  780
    ATCATTGTTG GGGCCTTGAT TGGTAGCCTG GTAGGTGCCG CCATCATCAT CTCTGTTGTG  840
    TGCTTCGCAA GGAATAAGGC AAAAGCAAAG GCAAAAGAAA GAAATTCTAA GACCATCGCG  900
    GAACTTGAGC CAATGACAAA GATAAACCCA AGGGGAGAAA GCGAAGCAAT GCCAAGAGAA  960
    GACGCTACCC AACTAGAAGT AAACTCTACCA TCTTCCATTC ATGAGACTGG CCCTGATACC 1020
    ATCCAAGAAC CAGACTATGA GCCAAAGCCT ACTCAGGAGC CTGCCCCAGA GCCTGCCCCA 1080
    GGATCAGAGC CTATGGCAGT GCCTGACCTT GACATCGAGC TGGAGCTGGA GCCAGAAACG 1140
    CAGTCGGAAT TGGAGCCAGA GCCAGAGCCA GAGCCAGAGT CAGAGCCTGG GGTTGTAGTT 1200
    GAGCCCTTAA GTGAAGATGA AAAGGGAGTG GTTAAGGCAT AG                     1242
```

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    1          11         21         31         41         51
    |          |          |          |          |          |
    CGCTCCTCGG GCTGCCCCTC GGTTGACAAT GGTCTCCAGG ATGGTCTCTA CCATGCTATC   60
    TGGCCTACTG TTTTGGCTGG CATCTGGATG GACTCCAGCA TTTGCTTACA GCCCCCGGAC  120
    CCCTGACCGG GTCTCAGAAG CAGATATCCA GAGGCTGCTT CATGGTGTTA TGGAGCAATT  180
    GGGGCATTGCC AGGCCCCGAG TGGAATATCC AGCTCACCAG GCCATGAATC TTGTGGGCCC  240
    CCAGAGCATT GAAGGTGGAG CTCATGAAGG ACTTCAGCAT TTGGGTCCTT TTGGCAACAT  300
    CCCCAACATC GTGGCAGAGT TGACTCGAGA CAACATTCCT AAGGACTTTA GTGAGGATCA  360
    GGGGTACCCA GACCCTCCAA ATCCCTGTCC TGTTGGAAAA ACAGATGATG GATGTCTAGA  420
    AAACACCCCT GACACTGCAG AGTTCAGTCG AGAGTTCCAG TTGCACCAGC ATCTCTTTGA  480
    TCCGGAACAT GACTATCCAG GCTTGGGCAA GTGGAACAAG AAACTCCTTT ACGAGAAGAT  540
    GAAGGGAGGA GAGAGACGAA AGCGGAGGAG TGTCAATCCA TATCTACAAG GACAGAGACT  600
    GGATAATGTT GTTGCAAAGA AGTCTGTCCC CCATTTTTCA GATGAGGATA AGGATCCAGA  660
    GTAAAGAGAA GATGCTAGAC GAAAACCCAC ATTACCTGTT AGGCCTCAGC ATGGCTTATG  720
    TGCACGTGTA AATGGAGTCC CTGTGAATGA CAGCATGTTT CTTACATAGA TAATTATGGA  780
    TACAAAGCAG CTGTATGTAG ATAGTGTATT GTCTTCACAC CGATGATTCT GCTTTTTGCT  840
    AAATTAGAAT AAAGAGCTTTT TTGTTTCTTG GGTTTTTAAA ATGTGAATCT GCAATGATCA  900
    TAAAAATTAA AATGTGAATG TCAACAATAA AAAGCAAGAC TATGAAAGGC TCAGATTTCT  960
    TGCAGTTTAA AATGGTGTCT GAGGTTGTAC TATTTTGGCC AAGTCTGTAG AAAGCTGTCA 1020
    TTTGATTTTG ATTATGTAGT TCATCCAGCC CTTGGGCATT GTTATACACC AGTAAAGAAG 1080
    GCTGTACTCA AGAGGAGGAG CTGACACATT TCACTTGGCT GCGTCTTAAT AAACATGAAT 1140
    GCAAGCATTG GC                                                     1152
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    1          11         21         31         41         51
    |          |          |          |          |          |
    AACATTCCTG CAAATGGTTT CAATATATGC AGATGTCTCG ATATAGGAAT GAAATTACGT   60
    CTTTGGAACA ACTTAAATAA GTCAAATATA CTTGGAGCTT TAAAAATTAA AAGGAGAGAG  120
    ATTCGAGCAC CTTTTCTGCT GCCATGACAA CCATGCAAGG AATGGAACAG GCCATGCCAG  180
    GGGCTGGCCC TGGTGTGCCC CAGCTGGGAA ACATGGCTGT CATACATTCA CATCTGTGGA  240
    AAGGATTGCA AGAGAAGTTC TTGAAGGGAG AACCCAAAGT CCTTGGGGTT GTGCAGATTC  300
    TGACTGCCCT GATGAGCCTT AGCATGGGAA TAACAATGAT GTGTATGGCA TCTAATACTT  360
    ATGGAAGTAA CCCTATTTCC GTGTATATCG GGTACACAAT TTGGGGGTCA GTAATGTTTA  420
    TTATTTCAGG ATCCTTGTCA ATTGCAGCAG GAATTAGAAC TACAAAAGGC CTGGTCCGAG  480
    GTAGTCTAGA AATGAATATC ACCAGCTCTG TACTGGCTGC ATCAGGGATC TTAATCAACA  540
    CATTTAGCTT GGCGTTTTAT TCATTCCATC ACCCTTACTG TAACTACTAT GGCAACTCAA  600
    ATAATTGTCA TGGGACTATG TCCATCTTAA TGGGTCTGGA TGGCATGGTG CTCCTCTTAA  660
    GTGTGCTGGA ATTCTGCATT GCTGTGTCCC TCTCTGCCTT TGGATGTAAA GTGCTCTGTT  720
    GTACCCCTGG TGGGGTTGTG TTAATTCTGC CATCACATTC TCACATGGCA GAAACAGCAT  780
    CTCCCACACC ACTTAATGAG GTTTGAGGCC ACCAAAAGAT CAACAGACAA ATGCTCCAGA  840
    AATCTATGCT GACTGTGACA CAAGAGCCTC ACATGAGAAA TTACCAGTAT CCAACTTCGA  900
    TACTGATAGA CTTGTTGATA TTATTATTAT ATGTAATCCA ATTATGAACT GTGTGTGTAT  960
    AGAGAGATAA TAAATTCAAA ATTATGTTCT CATTTTTTTC CCTGGAACTC AATAACTCAT 1020
    TTCACTGGCT CTTTATCGAG AGTACTAGAA GTTAAATTAA TAAATAATGC ATTTAATGAG 1080
    GCAACAGCAC TTGAAAGTTT TTCATTCATC ATAAGAACTT TATATAAAGG CATTACATTG 1140
    GCAAATAAGG TTTGGAAGCA GAAGAGCAAA AAAAAGATAT TGTTAAAATG AGGCCTCCAT 1200
    GCAAAACACA TACTTCCCTC CCATTTATTT AACTTTTTTT TTCTCCTACC TATGGGGACC 1260
    AAAGTGCTTT TTCCTTCAGG AAGTGGAGAT GCATGGCCAT CTCCCCCTCC CTTTTTCCTT 1320
    CTCCTGCTTT TCTTTCCCCA TAGAAAGTAC CTTGAAGTAG CACAGTCCGT CCTTGCATGT 1380
    GCACGAGCTA TCATTTGAGT AAAAGTATAC ATGGAGTAAA AATCATATTA AGCATCAGAT 1440
    TCAACTTATA TTTTCTATTT CATCTTCTTC CTTTCCCTTC TCCCACCTTC TACTGGGCAT 1500
    AATTATATCT TAATCATATA TGGAAATGTG CAACATATGG TATTTGTTAA ATACGTTTGT 1560
    TTTTATTGCA GAGCAAAAAT AAATCAAATT AGAAGCAATA AAAAAAAAAA AAAAAAAAA  1619
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Seq ID NO: C148 DNA Sequence
Nucleic Acid Accession #: NM_002091.1
Coding sequence: 56..502

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1         11        21        31        41        51
|         |         |         |         |         |
AGTCTCTGCT CTTCCCAGCC TCTCCGGCGC GCTCCAAGGG CTTCCCGTCG GGACCATGCG    60
CGGCAGTGAG CTCCCGCTGG TCCTGCTGGC GCTGGTCCTC TGCCTAGCGC CCCGGGGGCG   120
AGCGGTCCCG CTGCCTGCGG GCGGAGGGAC CGTGCTGACC AAGATGTACC CGCGCGGCAA   180
CCACTGGGCG GTGGGGCACT TAATGGGGAA AAAGAGCACA GGGGAGTCTT CTTCTGTTTC   240
TGAGAGAGGG AGCCTGAAGC AGCAGCTGAG AGAGTACATC AGGTGGGAAG AAGCTGCAAG   300
GAATTTGCTG GGTCTCATAG AAGCAAAGGA GAACAGAAAC CACCAGCCAC CTCAACCCAA   360
GGCCTTGGGC AATCAGCAGC CTTCGTGGGA TTCAGAGGAT AGCAGCAACT TCAAAGATGT   420
AGGTTCAAAA GGCAAAGTTG GTAGACTCTC TGCTCCAGGT TCTCAACGTG AAGGAAGGAA   480
CCCCCAGCTG AACCAGCAAT GATAATGATG GCCTCTCTCA AAAGAGAAAA ACAAAACCCC   540
TAAGAGACTG AGTTCTGCAA GCATCAGTTC TACGGATCAT CAACAAGATT TCCTTGTGCA   600
AAATATTTGA CTATTCTGTA TCTTTCATCC TTGACTAAAT TCGTGATTTT CAAGCAGCAT   660
CTTCTGGTTT AAACTTGTTT GCTGTGAACA ATTGTCGAAA AGAGTCTTCC AATTAATGCT   720
TTTTTATATC TAGGCTACCT GTTGGTTAGA TTCAAGGCCC CGAGCTGTTA CCATTCCAAA   780
TAAAAGCTTA AAACACAT                                                 797
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Seq ID NO: C149 DNA Sequence
Nucleic Acid Accession #: NM_012261.1
Coding sequence: 203..1045

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1         11        21        31        41        51
|         |         |         |         |         |
GATTTGCTCT GCCAGCAGCT GTCGGTGCCG CGCTCGACAC CGAGTCCTAG CTAGGCGCTC    60
ACAGAATACG CGCTCCCTCC CTCCCCCTTC TCTGTCCCCC GCCTCTCGCT CACCCCGGCC   120
CACTCCAGCG GCGACTTTGA GGGATTCCCT CTCTGGCGGC CTCTGCAGCA GCACAGCCGG   180
CCTCATTCGG GGCACTGCGA GTATGGATCT CCAAGGAAGA GGGGTCCCCA GCATCGACAG   240
ACTTCGAGTT CTCCTGATGT TGTTCCATAC AATGGCTCAA ATCATGGCAG AACAAGAAGT   300
GGAAAATCTC TCAGGCCTTT CCACTAACCC TGAAAAAGAT ATATTTGTGG TGCGGGAAAA   360
TGGGACGACG TGTCTCATGG CAGAGTTTGC AGCCAAATTT ATTGTACCTT ATGATGTGTG   420
GGCCAGCAAC TACGTAGATC TGATCACAGA ACAGGCCGAT ATCGCATTGA CCCGGGGAGC   480
TGAGGTGAAG GGCCGCTGTG GCCACAGCCA GTCGGAGCTG CAAGTGTTCT GGGTGGATCG   540
CGCATATGCA CTCAAAATGC TCTTTGTAAA GGAAAGCCAA AACATGTCCA AGGGACCTGA   600
GGCGACTTGG AGGCTGAGCA AAGTGCAGTT TGTCTACGAC TCCTCGGAGA AAACCCACTT   660
CAAAGACGCA GTCAGTGCTG GGAAGCACAC AGCCAACTCG CACCACCTCT CTGCCTTGGT   720
CACCCCCGCT GGGAAGTCCT ATGAGTGTCA AGCTCAACAA ACCATTTCAC TGGCCTCTAG   780
TGATCCGCAG AAGACGGTCA CCATGATCCT GTCTGCGGTC CACATCCAAC CTTTTGACAT   840
TATCTCAGAT TTTGTCTTCA GTGAAGAGCA TAAATGCCCA GTGGATGAGC GGGAGCAACT   900
GGAAGAAACC TTGCCCCTGA TTTTGGGGCT CATCTTGGGC CTCGTCATCA TGGTAACACT   960
CGCGATTTAC CACGTCCACC ACAAAATGAC TGCCAACCAG GTGCAGATCC CTCGGGACAG  1020
ATCCCAGTAT AAGCACATGG GCTAGAGGCC GTTAGGCAGG CACCCCTAT TCCTGCTCCC  1080
CCAACTGGAT CAGGTAGAAC AACAAAAGCA CTTTTCCATC TTGTACACGA GATACACCAA  1140
CATAGCTACA ATCAAACAGG CCTGGGTATC TGAGGCTTGC TTGGCTTGTG TCCATGCTTA  1200
AACCCACGGA AGGGGGAGAC TCTTTCGGAT TTGTAGGGTG AAATGGCAAT TATTCTCTCC  1260
ATGCTGGGGA GGAGGGGAGG AGGGTCTCAG ACAGCTTTCG TGCTCATGGT GGCTTGGCTT  1320
TGACTCTCCA AAGAGCAATA AATGCCACTT GGAGCTGTAT CTGGCCCCAA AGTTTAGGGA  1380
TTGAAAACAT GCTTCTTTGA GGAGGAAACC CCTTTAGGTT CAGAAGAATA TGGGGTGCTT  1440
TGCTCCCTTG GACACAGCTG GCTTATCCTA TACAGTTGTC AATGCACACA GAATACAACC  1500
TCATGCTCCC TGCAGCAAGA CCCCTGAAAG TGATTCATGC TTCTGGCTGG CATTCTGCAT  1560
GTTTAGTGAT TGTCTTGGGA ATGTTTCACT GCTACCCGCA TCCAGCGACT GCAGCACCAG  1620
AAAACGACTA ATGTAACTAT GCAGAGTTGT TTGGACTTCT TCCTGTGCCA GGTCCAAGTC  1680
GGGGGACCTG AAGAATCAAT CTGTGTGAGT CTGTTTTTCA AAATGAAATA AAACACACTA  1740
TTCTCTGGC                                                          1749
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Seq ID NO: C150 DNA Sequence
Nucleic Acid Accession #: NM_003226.1
Coding sequence: 2..226

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1         11        21        31        41        51
|         |         |         |         |         |
GATGCTGGGG CTGGTCCTGG CCTTGCTGTC CTCCAGCTCT GCTGAGGAGT ACGTGGGCCT    60
GTCTGCAAAC CAGTGTGCCG TGCCGGCCAA GGACAGGGTG GACTGCGGCT ACCCCCATGT   120
CACCCCCAAG GAGTGCAACA ACCGGGGCTG CTGCTTTGAC TCCAGGATCC CTGGAGTGCC   180
TTGGTGTTTC AAGCCCCTGA CTAGGAAGAC AGAATGCACC TTCTGAGGCA CCTCCAGCTG   240
CCCCTGGGAT GCAGGCTGAG CACCCTTGCC CGGCTGTGAT TGCTGCCAGG CACTGTTCAT   300
CTCAGTTTTT CTGTCCCTTT GCTCCCGGCA AGCTTTCTGC TGAAAGTTCA TATCTGGAGC   360
CTGATGTCTT AACGAATAAA GGTCCCATGC TCCACCCG                          398
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Seq ID NO: C151 DNA Sequence
Nucleic Acid Accession #: NM_002993.1
Coding sequence: 64..408

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1         11        21        31        41        51
|         |         |         |         |         |
GGCACGAGCC AGTCTCCGCG CCTCCACCCA GCTCAGGAAC CCGCGAACCC TCTCTTGACC    60
ACTATGAGCC TCCCGTCCAG CCGCGCGGCC CGTGTCCCGG GTCCTTCGGG CTCCTTGTGC   120
GCGCTGCTCG CGCTGCTGCT CCTGCTGACG CCGCCGGGGC CCCTCGCCAG CGCTGGTCCT   180
GTCTCTGCTG TGCTGACAGA GCTGCGTTGC ACTTGTTTAC GCGTTACGCT GAGAGTAAAC   240
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    CCCAAAACGA TTGGTAAACT GCAGGTGTTC CCCGCAGGCC CGCAGTGCTC CAAGGTGGAA    300
    GTGGTAGCCT CCCTGAAGAA CGGGAAGCAA GTTTGTCTGG ACCCGGAAGC CCCTTTTCTA    360
    AAGAAAGTCA TCCAGAAAAT TTTGGACAGT GGAAACAAGA AAAACTGAGT AACAAAAAAG    420
    ACCATGCATC ATAAAATTGC CCAGTCTTCA GCGGGAGCAGT TTTCTGGAGA TCCCTGGACC    480
    CAGTAAGAAT AAGAAGGAAG GGTTGGTTTT TTTCCATTTT CTACATGGAT TCCCTACTTT    540
    GAAGAGTGTG GGGGAAAGCC TACGCTTCTC CCTGAAGTTT ACAGCTCAGC TAATGAAGTA    600
    CTAATATAGT ATTTCCACTA TTTACTGTTA TTTTACCTGA TAAGTTATTG AACCCTTTGG    660
    CAATTGACCA TATTGTGAGC AAAGAATCAC TGGTTATTAG TCTTTCAATG AATATTGAAT    720
    TGAAGATAAC TATTGTATTT CTATCATACA TTCCTTAAAG TTTACCGAA AAGGCTGTGG    780
    ATTTCGTATG GAAATAATGT TTTATTAGTG TGCTGTTGAG GGAGGTATCC TGTTGTTCTT    840
    ACTCACTCTT CTCATAAAAT AGGAAATATT TTAGTTCTGT TTTCTTGGGG AATATGTTAC    900
    TCTTTACCCT AGGATGCTAT TTAAGTTGTA CTGTATTAGA ACACTGGGTG TGTCATACCG    960
    TTATCTGTGC AGAATATATT TCCTTATTCA GAATTTCTAA AAATTTAAGT TCTGTAAGGG    1020
    CTAATATATT CTCTTCCTAT GGTTTTAGAT GTTTGATGTC TTCTTAGTAT GGCATAATGT    1080
    CATGATTTAC TCATTAAACT TTGATTTTGT ATGCTATTTT TTCACTATAG GATGACTATA    1140
    ATTCTGGTCA CTAAATATAC ACTTTAGATA GATGAAGAAG CCCAAAAACA GATAAATTCC    1200
    TGATTGCTAA TTTACATAGA AATGTATTCT CTTGGTTTTT TAAATAAAAG CAAAATTAAC    1260
    AATGATCTGT GCTCTGCAAA GTTTTGAAAA TATATTTGAA CAATTTGAAT ATAAATTCAT    1320
    CATTTAGTCC TCAAAATATA TACAGCATTG CTAAGATTTT CAGATATCTA TTGTGGATCT    1380
    TTTAAAGGTT TTGACCATTT TGTTATGAGG AATTATACAT GTATCACATT CACTATATTA    1440
    AAATTGCACT TTTATTTTTT CCTGTGTGTC ATGTTGGTTT TTGGTACTTG TATTGTCATT    1500
    TGGAGAAACA ATAAAAGATT TCTAAACCAA AAAAAAAAAA AAAAAAA    1547
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Seq ID NO: C152 DNA Sequence
Nucleic Acid Accession #: NM_005242.2
Coding sequence: 148..1341

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    1         11        21        31        41        51
    |         |         |         |         |         |
    CGGCCCGCCC TGGGGAGGCG CGCAGCAGAG GCTCCGATTC GGGGCAGGTG AGAGGCTGAC    60
    TTTCTCTCGG TGCGTCCAGT GGAGCTCTGA GTTTCGAATC GGTGGCGGCG GATTCCCCGC    120
    GCGCCCGGCG TCGGGGCTTC CAGGAGGATG CGGAGCCCCA GCGCGGCCGTG GCTGCTGGGG    180
    GCCGCCATCC TGCTAGCAGC CTCTCTCTCC TGCAGTGGCA CCATCCAAGG AACCAATAGA    240
    TCCTCTAAAG GAAGAAGCCT TATTGGTAAG GTTGATGGCA CATCCCACGT CACTGGAAAA    300
    GGAGTTACAG TTGAAACAGT CTTTTCTGTG GATGAGTTTT CTGCATCTGT CCTCACTGGA    360
    AAACTGACCA CGGTCTTCCT TCCAATTGTC TACACAATTG TGTTTGTGGT GGGTTTGCCA    420
    AGTAACGGCA TGGCCCTGTG GGTCTTTCTT TTCCGAACTA AGAAGAAGCA CCCTGCTGTG    480
    ATTTACATGG CCAATCTGGC CTTGGCTGAC CTCCTCTCTG TCATCTGGTT CCCCCTTGAAG    540
    ATTGCCTATC ACATACATGC CAACAACTGG ATTTATGGGG AAGCTCTTTG TAATGTGCTT    600
    ATTGGCTTTT TCTATGGCAA CATGTACTGT TCCATTCTCT TCATGACCTG CCTCAGTGTG    660
    CAGAGGTATT GGGTCATCGT GAACCCCATG GGGCACTCCA GGAAGAAGGC AAACATTGCC    720
    ATTGGCATCT CCCTGGCAAT ATGGCTGCTG ATTCTGCTGG TCACCATCCC TTTGTATGTC    780
    GTGAAGCAGA CCATCTTCAT TCCTGCCCTG AACATCACGA CCTGTCATGA TGTTTTGCCT    840
    GAGCAGCTCT TGGTGGGAGA CATGTTCAAT TACTTCCTCT CTCTGGCCAT TGGGGTCTTT    900
    CTGTTCCCAG CCTTCCTCAC AGCCCTCTGCC TATGTGCTGA TGATCAGAAT GCTGCGATCT    960
    TCTGCCATGG ATGAAAACTC AGAGAAGAAA AGGAAGAGGG CCATCAAACT CATTGTCACT    1020
    GTCCTGGCCA TGTACCTGAT CTGCTTCACT CCTAGTAACC TTCTGCTTGT GGTGCATTAT    1080
    TTTCTGATTA GAGCCAGGG CCAGAGCCAT GTCTATGCCC TGTACATTGT AGCCCTCTGC    1140
    CTCTCTACCC TTAACAGCTG CATCGACCCC TTTGTCTATT ACTTTGTTTC ACATGATTTC    1200
    AGGGATCATG CAAAGAACGC TCTCCTTTGC CGAAGTGTCC GCACTGTAAA GCAGATGCAA    1260
    GTATCCCTCA CCTCAAAGAA ACACTCCAGG AAATCCAGCT CTTACTCTTC AAGTTCAACC    1320
    ACTGTTAAGA CCTCCTATTG AGTTTTCCAG GTCCTCAGAT GGGAATTGCA CAGTAGGATG    1380
    TGGAACCTGT TTAATGTTAT GAGGACGTGT CTGTTATTTC CTAATCAAAA AGGTCTCACC    1440
    ACATACCACC G    1451
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Seq ID NO: C153 DNA Sequence
Nucleic Acid Accession #: NM_003469.2
Coding sequence: 92..1945

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    1         11        21        31        41        51
    |         |         |         |         |         |
    GAAACGGCCC GAGAAGCTCG CCCGGAGAAC GGGGAGGAAT ATGCTGTGGA GCTCCTCTGC    60
    CATATAAACA AAAAGAGGAA ATCTTTCAAA CATGGCTGAA CCAAAGACCC ACTGGCTTGG    120
    AGCAGCCCTG TCTCTTATCC CTTTAATTTT CCTCATCTCT GGGGCTGAAG CAGCTTCATT    180
    TCAGAGAAAC CAGCTGCTTC AGAAAGAACC AGACCTCAGG TTGGAAAATG TCCAAAAGTT    240
    TCCCAGTCCT GAAATGATCA GGGCTTTGGA GTACATAGAA AACCTCCGAC AACAAGCTCA    300
    TAAGGAAGAA AGCAGCCCAG ATTATAATCC CTACCAAGGT GTCTCTGTCC CCCTTCAGCA    360
    AAAAGAAAAT GGCGATGAAA GCCACTTGCC CGAGAGGGAT TCACTGAGTG AAGAAGACTG    420
    GATGAGAATA ATACTCGAAG CTTTGAGACA GGCTGAAAAT GAGCCTCAGT CTGCACCAAA    480
    AGAAAATAAG CCCTATGCCT TGAATTCAGA AAAGAACTTT CCAATGGACA TGAGTGATGA    540
    TTATGAGACA CAGCAGTGGC CAGAAAGAAA GCTTAAGCAC ATGCAATTCC CTCCTATGTA    600
    TGAAGAAT TCCAGGGATA ACCCCTTTAA ACGCACAAAT AGGAACAATA    660
    TACTCCTCAA AGCCTTGCTA CATTGGAATC TGTCTTCCAA GAGCTGGGGA AACTGACAGG    720
    ACCAAACAAC CAGAAACGTG AGAGGATGGA TGAGGAGCAA AAACTTTATA CGGATGATGA    780
    AGATGATATC TACAAGGCTA ATAACATTGC CTATGAAGAT GTGGTCGGGG GAGAAGACTG    840
    GAACCCAGTA GAGGAGAAAA TAGAGAGTCA AACCCAGGAA GAGGTGAGAG ACAGCAAAGA    900
    GAATATAGGA AAAAATGAAC AAATCAACGA TGAGATGAAA CGCTCAGGGC AGCTTGGCAT    960
    CCAGGAAGAA GATCTTCGGA AAGAGAGTAA AGACCAACTC TCAGATGATG TCTCCAAAGT    1020
    AATTGCCTAT TTGAAAAGGT TAGTAAATGC TGCAGGAAGT GGGAGGTTAC AGAATGGGCA    1080
    AAATGGGGAA AGGGCCACCA GGCTTTTTGA GAAACCTCTT GATTCTCAGT CTATTTATCA    1140
    GCTGATTGAA ATCTCAAGGA ATTTACAGAT ACCCCCAGAA GACTTAATTG AGATGCTCAA    1200
    AACTGGGGAG AAGCCGAATG GATCAGTGGA ACCGGAGCGG GAGCTTGACC TTCCTGTTGA    1260
    CCTAGATGAC ATCTCAGAGG CTGACTTAGA CCATCCCGAC CTGTTCCACA ATAGGATGCT    1320
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      CTCCAAGAGT GGCTACCCTA AAACACCTGG TCGTGCTGGG ACTGAGGCCC TACCAGACGG    1380
      GCTCAGTGTT GAGGATATTT TAAATCTTTT AGGGATGGAG AGTGCAGCAA ATCAGAAAAC    1440
      GTCGTATTTT CCCAATCCAT ATAACCAGGA GAAAGTTCTG CCAAGGCTGC CTTATGGTGC    1500
      TGGAAGATCT AGATCGAACC AGCTTCCCAA AGCTGCCTGG ATTCCACATG TTGAAAACAG    1560
      ACAGATGGCA TATGAAAACC TGAACGACAA GGATCAAGAA TTAGGTGAGT ACTTGGCCAG    1620
      GATGCTAGTT AAATACCCTG AGATCATTAA TTCAAACCAA GTGAAGCGAG TTCCTGGTCA    1680
      AGGCTCATCT GAAGATGACC TGCAGGAAGA GGAACAAATT GAGCAGGCCA TCAAAGAGCA    1740
      TTTGAATCAA GGCAGCTCTC AGGAGACTGA CAAGCTGGCC CCGGTGAGCA AAAGGTTCCC    1800
      TGTGGGGCCC CCGAAGAATG ATGATACCCC AAATAGGCAG TACTGGGATG AAGATCGTT    1860
      AATGAAAGTG CTGGAATACC TCAATCAAGA AAAGGCAGAA AAGGGAAGGG AGCATATTGC    1920
      TAAGAGAGCA ATGGAAAATA TGTAAGCTGC TTTCATTAAT TACCCTACTT TCATTCCTCC    1980
      CACCCCAAGC AAATCCCAAC ATTTCTCTTC AGTGTGTTGA CTTCTATCCT GTTAACACTG    2040
      TAATATCTTT AAATGATGTA CAGGCAGATG AAACCAGGTC ACTGGGGAGT CTGCTTCATT    2100
      TCCTCTGAGC TGTTATCTTG TGTATGGATA TGTGTAAATG TTATGACTCC TTGATAAAAA    2160
      ATTTATTATG TCCATTATTC AAGAAAGATA TCTATGACTG TGTTTAATAG TATATCTAAT    2220
      GGCTGTGGCA TTGTTGAATG TCACATATGA TAAAAAAGTG TCCTATAATT CTATTGAAAG    2280
      TTTTTAATAT TTATTGAATT ATTTTGTTAC TGTCTGTAGC GTTTTGTGGA GTACTGGACC    2340
      AAAAAAATAA AGCATTATAA ATATA                                          2365
```

Seq ID NO: C154 DNA Sequence
Nucleic Acid Accession #: NM_030955
Coding sequence: 327..5108

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      1          11         21         31         41         51
      |          |          |          |          |          |
      GAATTCCGGG AGCGGGCGGG CTGCGAGGCC GCGGGGCATG CGGGAGGCGG AGGGGTGGGA     60
      CCGGGTGGCT GCGCCCATTC CACACCCGCC GAAAGCGGAC ACTGTCAGCT GAATCACTCC    120
      CCTTTTAGGA GGAGGGAGGG GGAAAAGGTG TCTAGCTAAT TTCTGCTTAA AAAAGCACAG    180
      GAGATCGCGG GTCAGCTTTG CAGTCGCTGC CTTCTCGCGC CTGACCATGC ACCCCTGCAT    240
      CTTCCTGCTG GGCACAGGCG AGCGCTTTAT TTCTGGAGCT GAGGGCTAAA ACTTTTTTCA    300
      CTTTTCTTCT CCTCAACATC TGAATCATGC CATGTGCCCA GAGGAGCTGG CTTGCAAACC    360
      TTTCGTGGT GGCTCAGCTC CTTAACTTTG GGGCGCTTTG CTATGGGAGA CAGCCTCAGC    420
      CAGGCCCGGT TCGCTTCCCG GACAGGAGGC AAGAGCATTT TATCAAGGGC CTGCCAGAAT    480
      ACCACGTGGT GGGTCCAGTC CGAGTAGATG CCAGTGGGCA TTTTTTTGTCA TATGGCTTGC    540
      ACTATCCCAT CACGAGCAGC AGGAGGAAGA GAGATTTGGA TGGCTCAGAG GACTGGGTGT    600
      ACTACAGAAT TTCTCACAGG GAGAAGGACC TGTTTTTTAA CTTGACGGTC AATCAAGGAT    660
      TTCTTTCCAA TAGCTACATC ATGGAGAAGA GATATGGGAA CCTCTCCCAT GTTAAGATGA    720
      TGGCTTCCTC TGCCCCCCTC TGCCATCTCA GTGGCACGGT TCTACAGCAG GGCACCAGAG    780
      TTGGACGGC AGCCCTCAGT GCCTGCCATG GACTGACTGG ATTTTTCCAA CTACCACATG    840
      GAGACTTTTT CATTGAACCC GTGAAGAAGC ATCCACTGGT TGAGGGAGGG TACCACCCGC    900
      ACATCGTTTA CAGGAGGCAG AAAGTTCCAG AAACCAAGGA GCCAACCTGT GGATTAAAGG    960
      ACAGTGTTAA CATCTCCCAG AAGCAAGAGC TATGGCGGGA GAAGTGGGAG AGGCACAACT    1020
      TGCCAAGCAG AAGCCTCTCT CGGCGTTCCA TCAGCAAGGA GAGATGGGTG GAGACACTGG    1080
      TGGTGGCCGA CACAAAGATG ATTGAATACC ATGGGAGTGA GAATGTGGAG TCCTACATCC    1140
      TCACCATCAT GAACATGGTC ACTGGGTTGT TCCATAACCC AAGCATTGGC AATGCAATTC    1200
      ACATTGTTGT GGTTCGGCTC ATTCTACTCG AAGAAGAAGA GCAAGGACTG AAAATAGTTC    1260
      ACCATCAGA AAAGACACTG TCTAGCTTCT GCAAGTGGCA GAAGAGTATC AATCCCAAGA    1320
      GTGACCTCAA TCCTGTTCAT CACGACGTGG CTGTCCTTCT CACCAGAAAG GACATCTGTG    1380
      CTGGTTTCAA TCGCCCCTGC GAGACCCTGG GCCTGTCTCA CCTTTCAGGA ATGTGTCAGC    1440
      CTCACCGCAG TTGTAACATC AATGAAGATT CGGGACTCCC TCTGGCTTTC ACAATTGCCC    1500
      ATGAGCTAGG ACACAGCTTC GGCATCCAGC ATGATGGGAA AGAAAATGAC TGTGAGCCTG    1560
      TGGGCAGACA TCCGTACATC ATGTCCCGCC AGCTCCAGTA CGATCCCACT CCGCTGACAT    1620
      GGTCCAAGTC CAGCGAGGAG TACATCACCC GCTTCTTGGA CCGAGGCTGG GGGTTCTGTC    1680
      TTGATGACAT ACCTAAAAAG AAAGGCTTGA AGTCCAAGGT CATTGCCCCC GGAGTGATCT    1740
      ATGATGTTCA CCACCAGTGA CAGCTACAAT ATGGACCCAA TGCTACCTTC TGCCAGGAAG    1800
      TAGAAAACGT CTGCCAGACA CTGTGGTGCT CCGTGAAGGG CTTTTGTCGC TCTAAGCTGG    1860
      ACGCTGCTGC AGATGGAACT CAATGTGGTG AGAAGAAGTG GTGTATGGCA GGCAAGTGCA    1920
      TCACAGTGGG GAAGAAACCA GAGAGCATTC CTGGAGGCTG GGGCCGCTGG TCACCCTGGT    1980
      CCCACTGTTC CAGGACCTGT GGGGCTGGAG TCCAGAGCGC AGAGAGGCTC TGCAACAACC    2040
      CCGAGCCAAA GTTTGGAGGG AAATATTGCA CTGGAGAAAG AAAACGCTAT CGCTTGTGCA    2100
      ACGTCCACCC CTGTCGCTCA GAGGCACCAA CATTTCGGCA GATGCAGTGC AGTGAATTTG    2160
      ACACTGTTCC CTACAAGAAT GAACTCTACC ACTGGTTTCC CATTTTTAAC CCAGCACATC    2220
      CTTGTGAGCT CTACTGCCGA CCCATAGATG GCCAGTTTTC TGAGAAAATG CTGGATGCTG    2280
      TCATTGATGG TACCCCTTGC TTTGAAGGCG GCAACAGCAG AAATGTCTGT ATTAATGGCA    2340
      TATGTAAGAT GGTTGGCTGT GACTATGAGA TCGATTCCAA TGCCACCGAG GATCGCTGCG    2400
      GTGTGTGCCT GGGAGATGGC TCTTCCTGCC AGACTGTGAG AAAGATGTTT AAGCAGAAGG    2460
      AAGGATCTGG TTATGTTGAC ATTGGGCTCA TTCCAAAAGG AGCAAGGGAC ATAAGAGTGA    2520
      TGGAAATTGA GGGAGCTGGA AACTTCCTGG CCATCAGGAG TGAAGATCCT GAAAAATATT    2580
      ACCTGAATGG AGGGTTTATT ATCCAGTGGA ACGGGAACTA TAAGCTGGCA GGGACTGTCT    2640
      TTCAGTATGA CAGGAAAGGA GACCTGGAAA AGCTGATGGC CACCAATGAGT    2700
      CTGTGTGGAT CCAGCTTCTA TTCCAGGTGA CTAACCCTGG CATCAAGTAT GAGTACACAA    2760
      TCCAGAAAGA TGGCCTTGAC AATGATGTTG AGCAGATGTA CTTCTGGCAG TACGGCCACT    2820
      GGACAGAGTG CAGTGTGACC TGCGGGACAG GTATCCGCCG CCAAACCTGC CATTGCATAA    2880
      AGAAGGGCCG CGGGATGGTG AAAGCTACAT TCTGTGACCC AGAAACACAG CCCAATGGGA    2940
      GACAGAAGAA GTGCCATGAA AAGGCTTGTC CACCCAGGTG GTGGGCAGGG GAGTGGGAAG    3000
      CATGCTCGGC GACATGCGGG CCCCACGGGG AGAAGAAGCG AACCGTGCTG TGCATCCAGA    3060
      CCATGGTCTC TGACGAGCAG GCTCTCCCGC CCACAGACTG CCAGCACCTG CTGAAGCCCA    3120
      AGACCCTCCT TTCCTGCAAC AGAGACATCC TGTGCCCCTC GGACTGGACA GTGGGCAACT    3180
      GGAGTGAGTG TTCTGTTTCC TGTGGTGGTG GAGTGCGGGAT TCGCAGTGTC ACATGTGCCA    3240
      AGAACCATGA TGAACCTTGC GATGTGACAA GGAAACCCAA CAGCCGAGCT CGTGTGTGGCC    3300
      TCCAGCAATG CCCTTCTAGC CGGAGAGTTC TGAAACCAAA CAAAGGCACT ATTTCCAATG    3360
      GAAAAAACCC ACCAACACTA AAGCCCGTCC CTCCACCTAC ATCCAGGCCC AGAATGCTGA    3420
      CCACACCCAC AGGGCCTGAG TCTATGAGCA CAAGCACTCC AGCAGTCAGC AGCCCTAGTC    3480
      CTACCACAGC CTCCAAAGAA GGAGACCTGG GTGGGAAACA GTGGCAAGAT AGCTCAACCC    3540
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          AACCTGAGCT GAGCTCTCGC TATCTCATTT CCACTGGAAG CACTTCCCAG CCCATCCTCA   3600
          CTTCCCAATC CTTGAGCATT CAGCCAAGTG AGGAAAATGT TTCCAGTTCA GATACTGGTC   3660
          CTACCTCGGA GGGAGGCCTT GTAGCTACAA CAACAAGTGG TTCTGGCTTG TCATCTTCCC   3720
          GCAACCCTAT CACTTGGCCT GTGACTCCAT TTTACAATAC CTTGACCAAA GGTCCAGAAA   3780
 5        TGGAGATTCA CAGTGGCTCA GGGGAAGAAA GAGAACAGCC TGAGGACAAA GATGAAAGCA  ·3840
          ATCCTGTAAT ATGGACCAAG ATCAGAGTAC CTGGAAATGA CGCTCCAGTG GAAAGTACAG   3900
          AAATGCCACT TGCACCTCCA CTAACACCAG ATCTCAGCAG GGAGTCCTGG TGGCCACCCT   3960
          TCAGCACAGT AATGGAAGGA CTGCTCCCCA GCCAAAGGCC CACTACTTCC GAAACTGGGA   4020
          CACCCAGAGT TGAGGGGATG GTTACTGAAA AGCCAGCCAA CACTCTGCTC CCTCTGGGAG   4080
 10       GAGACCACCA GCCAAACCCC TCAGGAAAGA CGGCAAACCG TAACCACCTG AAACTTCCAA   4140
          ACAACATGAA CCAAACAAAA AGTTCTGAAC CAGTCCTGAC TGAGGAGGAT GCAACAAGTC   4200
          TGATTACTGA GGGCTTTTTG CTAAATGCCT CCAATTACAA GCAGCTCACA AACGGCCACG   4260
          GCTCTGCACA CTGGATCGTC GGAAACTGGA GCGAGTGCTC CACCACATGT GGCCTGGGGG   4320
          CCTACTGGAA AAGGGTGGAG TGCACCACCC AGATGGGATTC TGACTGTGCG GCCATCCAGA   4380
 15       GACCTGACCC TGCAAAAAGA TGCCACCTCC GTCCCTGTGC TGGCTGGAAA GTGGGAAACT   4440
          GGAGCAAGTG CTCCAGAAAC TGCAGTGGGG GCTTCAAGAT GCGCGAGATT CAGTGCGTGG   4500
          ACAGCCGGGA CCACCGGAAC CTGAGGCCAT TTCACTGCCA GTTCCTGGCC GGCATTCCTC   4560
          CCCCATTGAG CATGAGCTGT AACCCGGAGC CCTGTGAGGC GTGGCAGGTG GAGCCTTGGA   4620
          GCCAGTGCTC CAGGTCCTGT GGAGGTGGAG TTCAGGAGAG AGGAGTGTTC TGTCCAGGCA   4680
 20       GCCTCTGTGA TTGGACAAAA AGACCCACAT CCACCATGTC TTGCAATGAG CACCTGTGCT   4740
          GTCACTGGGC CACTGGGAAC TGGGACCCTGT GTTCCACTTC CTGTGGAGGT GGCTTTCAGA   4800
          AGAGGATTGT CCAATGTGTG CCCTCAGAGG GCAATAAAAC TGAAGACCAA GACCAATGTC   4860
          TATGTGATCA CAAACCCAGA CCTCCAGAAT TCAAAAAATG CAACCAGCAA GCCTGCAAGA   4920
          AAAGTGCCGA TTTACTTTGC ACTAAGGACA AACTGTCAGC CAGTTTCTGC CAGACACTGA   4980
 25       AAGCCATGAA GAAATGTTCT GTGCCCACCG TGAGGGCTGA GTGCTGCTTC TCGTGTCCCC   5040
          AGACACACAT CACACACACC CAAAGGCAAA GAAGGCAACG GTTGCTCCAA AAGTCAAAAG   5100
          AACTCTAAGC CCAAA                                                    5115
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          1          11         21         31         41         51
          |          |          |          |          |          |
          GCTCTCATTA CCTTCTGCCC ATCACTTAAT AAATAGCCAG CCAATTCATC AACATTCTGG   60
          TACACTGTTG GAGAGATGAG ACAGTCACAC CAGCTGCCCC TAGTGGGGCT CTTACTGTTT   120
          TCTTTTATTC CAAGCCAACT ATGCGAGATT TGTGAGGTAA GTGAAGAAAA CTACATCCGC   180
          CTAAAACCTC TGTTGAATAC AATGATCCAG TCAAACTATA ACAGGGGAAC CAGCGCTGTG   240
          AATGTTGTGT TGTCCCTCAA ACTTGTTGGA ATCCAGATCC AAACCCTGAT GCAAAAGATG   300
 40       ATCCAACAAA TCAAATACAA TGTGAAAAGC AGATTGTCAG ATGTAAGCTC GGGAGAGCTT   360
          GCCTTGATTA TACTGGCTTT GGGAGTATGT CGTAACGCTG AGGAAAACTT AATATATGAT   420
          TACCACCTGA CTGACAAGCT AGAAAATAAA TTCCAAGCAG AAATTGAAA TATGGAAGCA   480
          CACAATGGCA CTCCCCTGAC TAACTACTAC CAGCTCAGCC TGGACGTTTT GGCCTTGTGT   540
          CTGTTCAATG GGAACTACTC AACCGCCGAA GTTGTCAACC ACTTCACTCC TGAAAATAAA   600
 45       AACTATTATT TTGGTAGCCA GTTCTCAGTA GATACTGGTG CAATGGCTGT CCTGGCTCTG   660
          ACCTGTGTGA AGAAGAGTCT AATAAATGGG CAGATCAAAG CAGATGAAGG CAGTTTAAAG   720
          AACATCAGTA TTTATACAAA GTCACTGGTA GAAAAGATTC TGTCTGAGAA AAAAGAAAAT   780
          GGTCTCATTG GAAACACATT TAGCACAGGA GAAGCCATGC AGGCCCTCTT TGTATCATCA   840
          GACTATTATA ATGAAAATGA CTGGAATTGC CAACAAACTC TGAATACAGT GCTCACGGAA   900
 50       ATTTCTCAAG GAGCCATTCAG TAATCCAAAC GCTGCAGCCC AGGTCTTACC TGCCCTGATG   960
          GGAAAGACCT TCTTGGATAT TAACAAAGAC TCTTCTTGCG TCTCTGCTTC AGGTAACTTC   1020
          AACATCTCCG CTGATGAGCC TATAACTGTG ACACCTCCTG ACTCACAATC ATATATCTCC   1080
          GTCAATTACT CTGTGAGAAT CAATGAAACA TATTTCACCA ATGTCACTGT GCTAAATGGT   1140
          TCTGTCTTCC TCAGTGTGAT GGAGAAAGCC CAGAAAATGA ATGATACTAT ATTTGGTTTC   1200
 55       ACAATGGAGG AGCGCTCATG GGGGCCCTAT ATCACCTGTA TTCAGGGCCT ATGTGCCAAC   1260
          AATAATGACA GAACCTACTG GGAACTTCTG AGTGGAGGCG AACCACTGAG CCAAGGAGCT   1320
          GGTAGTTACG TTGTCCGACAA TGGAGAAAAC TTGGAGGTTC GCTGGAGCAA ATACTAATAA   1380
          GCCCAAACTT TCCTCAGCTG CATAAAATCC ATTTGCAGTG GAGTTCCATG TTTATTGTCC   1440
          TTATGCCTTC TTCTTCATTT ATCCCAGTAC GAGCAGGAGA GTTAATAACC TCCCCTTCTC   1500
 60       TCTCTACATG TTCAATAAAA GTTGTTGAAA GATTAAC                             1537
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          1          11         21         31         41         51
          |          |          |          |          |          |
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          GTGCTGTACC AAGAGTTTGC TCCTGGCTGC TTTGATGTCA GTGCTGCTAC TCCACCTCTG   120
 70       CGGCGAATCA GAAGCAGCAA GCAACTTTGA CTGCTGTCTT GGATACACAG ACCGTATTCT   180
          TCATCCTAAA TTTATTGTGG GCTTCACACG GCAGCTGGCC AATGAAGGCT GTGACATCAA   240
          TGCTATCATC TTTCACACAA AGAAAAAGTT GTCTGTGTGC GCAAATCCAA AACAGACTTG   300
          GGTGAAATAT ATTGTGCGTC TCCTCAGTAA AAAAGTCAAG AACATGTAAA AACTGTGGCT   360
          TTTCTGGAAT GGAATTGGAC ATAGCCCAAG AACAGAAAGA ACCTTGCTGG GGTTGGAGGT   420
 75       TTCACTTGCA CATCATGGAG GGTTTAGTGC TTATCTAATT TGTGCCTCAC TGGACTTGTC   480
          CAATTAATGA AGTTGATTCA TATTGCATCA TAGTTTGCTT TGTTTAAGCA TCACATTAAA   540
          GTTAAACTGT ATTTTATGTT ATTTATAGCT GTAGGTTTTC TGTGTTTAGC TATTTAATAC   600
          TAATTTTCCA TAAGCTATTT TGGTTTAGTG CAAAGTATAA AATTATATTT GGGGGGGAAT   660
          AAGATTATAT GGACTTTCTT GCAAGCAACA AGCTATTTTT TAAAAAAACT ATTTAACATT   720
 80       CTTTTGTTTA TATTGTTTTG TCTCCTAAAT TGTTGTAATT GCATTATAAA ATAAGAAAAA   780
          CATTAATAAG ACAAATATT                                                 799
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Coding sequence: 27..809

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CCGGGGGCGT CGGCCTTTTG GTGCTGCTGC TGCTCGGCCT GTTTCGGCCG CCCCCGCGC    120
TCTCGCGCGCG GCCGGTAAAG GAACCCCGCG GCCTAAGCGC AGCGTCTCCG CCCTTGGCTG   180
AGACTGGCGC TCCTCGCCGC TTCCGGCGGT CAGTGCCCCG AGGTGAGGCG GCGGGGGCGG   240
TGCAGGAGCT GGCGCGGGCG CTGGCGCATC TGCTGGAGGC CGAACGTCAG GAGCGGGCGC   300
GGGCCGAGGC GCAGGAGGCT GAGGATCAGC AGGCGCGCGT CCTGGCGCAG CTGCTGCGCG   360
TCTCGGGGCGC CCCCCGCAAC TCTGATCCGG CTCTGGGCCT GGACGACGAC CCCGACGCGC   420
CTGCAGCGCA GCTCGCTCGC GCTCTGCTCC GCGCCCGCCT TGACCCTGCC GCCCTAGCAG   480
CCCAGCTTGT CCCCGCGCCC GTCCCCGCCG CGGCGCTCCG ACCCCGGCCC CCGGTCTACG   540
ACGACGGCCC CGCGGGCCCG GATGCTGAGG AGGCAGGCGA CGAGACACCC GACGTGGACC   600
CCGAGCTGTT GAGGTACTTG CTGGGACGGA TTCTTGCGGG AAGCGCGGAC TCCGAGGGGG   660
TGGCAGCCCC GCGCCGCCTC CGCCGTGCCG CCGACCACGA TGTGGGCTCT GAGCTGCCCC   720
CTGAGGGCGT GCTGGGGGCG CTGCTGCGTG TGAAACGCCT AGAGACCCCG GCGCCCCAGG   780
TGCCTGCACG CCGCCTCTTG CCACCCTGAG CACTGCCCGG ATCCCGTGCA CCCTGGGACC   840
CAGAAGTGCC CCCGCCATCC CGCCACCAGG ACTTCTCCCC GCCAGCACGT CCAGAGCAAC   900
TTACCCCGGCC CAGCCAGCCC TCTCACCCGA GGATCCCTAC CCCCTGGCCC ACAATAACAT   960
GATCTGAGC                                                            969
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,Seq ID NO: C158 DNA Sequence
Nucleic Acid Accession #: NM_002245.2
Coding sequence: 183..1193

1          11         21         31         41         51
|          |          |          |          |          |
GGGCAGGAAG ACGGCGCTGC CCGGAGGAGC GGGGCGGGCG GGCGCGCGGG GGAGCGGGCG    60
GCGGGCGGGA GCCAGGCCCG GGCGGGGGCG GGGGCGGCGG GGCCAGAAGA GGCGGCGGGC   120
CGCGCTCCGG CCGGTCTGCG GCGTTGGCCT TGGCTTTGGC TTTGGCGGCG GCGGTGGAGA   180
AGATGCTGCA GTCCCTGGCC GGCAGCTCGT GCGTGCGCCT GGTGGAGCGG CACCGCTCGG   240
CCTGGTGCTT CGGCTTCCTG GTGCTGGGCT ACTTGCTCTA CCTGGTCTTC GGCGCAGTGG   300
TCTTCTCCTC GGTGGAGCTG CCCTATGAGG ACCTGCTGCG CCAGGAGCTG CGCAAGCTGA   360
AGCGACGCTT CTTGGAGGAG CACGAGTGCC TGTCTGAGCA GCAGCTGGAG CAGTTCCTGG   420
GCCGGGTGCT GGAGGCCAGC AACTACGGCG TGTCGGTGCT CAGCAACGCC TCGGGCAACT   480
GGAACTGGGA CTTCACCTCC GCGCTCTTCT TCGCCAGCAC CGTGCTCTCC ACCACAGGTT   540
ATGGCCACAC CGTGCCCTTG TCAGATGGAG GTAAGGCCTT CTGCATCATC TACTCCGTCA   600
TTGGCATTCC CTTCACCCTC CTGTTCCTGA CGGCTGTGGT CCAGCGCATC ACCGTGCACG   660
TCACCCGCAG GCCGGTCCTC TACTTCCACA TCCGCTGGGG CTTCTCCAAG CAGGTGGTGG   720
CCATCGTCCA TGCCGTGCTC CTTGGGTTTG TCACTGTGTC CTGCTTCTTC TTCATCCCGG   780
CCGCTGTCTT CTCAGTCCTG GAGGATGACT GGAACTTCCT GGAATCCTTT TATTTTTGTT   840
TTATTTCCCT GAGCACCCATT GGCCTGGGGG ATTATGTGCC TGGGGAAGGC TACAATCAAA   900
AATTCAGAGA GCTCTATAAG ATTGGGATCA CGTGTTACCT GCTACTTGGC CTTATTGCCA   960
TGTTGGTAGT TCTGGAAACC TTCTGTGAAC TCCATGAGCT GAAAAATTC AGAAAAATGT   1020
TCTATGTGAA GAAGGACAAG GACGAGGATC AGGTGCACAT CATAGAGCAT GACCAACTGT   1080
CCTTCTCCTC GATCACGAC CAGGCAGCTG GCATGAAAGA GGACCAGAAG CAAAATGAGC   1140
CTTTTGTGGC CACCCAGTCA TCTGCCTGCG TGGATGGCCT TGCAAACCAT TGAGCGTAGG   1200
ATTTGTTGCA TTATGCTAGA GCACCAGGGT CAGGGTGCAA GGAAGAGGCT TAAGTATGTT   1260
CATTTTTATC AGAATGCAAA AGCGAAAATT ATGTCACTTT AAGAAATAGC TACTGTTTGC   1320
AATGTCTTAT TAAAAAACAA CAAAAAAAGA CACATGGAAC AAAGAAGCTG TGACCCCAGC   1380
AGGATGTCTA ATATGTGAGG AAATGAGATG TCCACCTAAA ATTCATATGT GACAAAATTA   1440
TCTCGACCTT ACATAGGAGG AGAATACTTG AAGCAGTATG CTGCTGTGGT TAGAAGCAGA   1500
TTTTATACTT TTAACTGGAA ACTTTGGGGT TTGCATTTAG ATCATTTAGC TGATGGCTAA   1560
ATAGCAAAAT TTATATTTAG AAGCAAAAAA AAAAAGCATA GAGATGTGTT TTATAAATAG   1620
GTTTATGTGT ACTGGTTTGC ATGTACCCAC CCAAAATGAT TATTTTTGGA GAATCTAAGT   1680
CAAACTCACT ATTTATAATG CATAGGTAAC CATTAACTAT GTACATATAA AGTATAAATA   1740
TGTTTATATT CTGTACATAT GGTTTAGGTC ACCAGATCCT AGTGTAGTTC TGAAACTAAG   1800
ACTATAGATA TTTTGTTTCT TTTGATTTCT CTTTATACTA AAGAATCCAG AGTTGCTACA   1860
ATAAAATAAG GGAATAATAA AACTTGAGAG TGAATAACCA T                       1901
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Seq ID NO: C159 DNA Sequence
Nucleic Acid Accession #: NM_005472.1
Coding sequence: 93..404

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|          |          |          |          |
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CCGAGTCTTC CCCCACCTCA ATCCCTGTTG CTATGGAGAC TACCAATGGA ACGAGACCT    120
GGTATGAGAG CCTGCATGCC GTGCTGAAGG CTCTAAATGC CACTCTTCAC AGCAATTTGC   180
TCTGCCGGCC AGGGCCAGGG CTGGGGCCAG ACAACCAGAC TGAAGAGAGG CGGGCCAGCC   240
TACCTGGCCG TGATGACAAC TCCTACATGT ACATTCTCTT TGTCATGTTT CTATTTGCTG   300
TAACTGTGGG CAGCCTCATC CTGGGATACA CCCGCTCCCG CAAAGTGGAC AAGCGTAGTG   360
ACCCCTATCA TGTGTATATC AAGAACCGTG TGTCTATGAT CTAACACGAG AGGGCTGGGA   420
CGGTGGAAGA CCAAGACACC TGGGGATTGC GTCTGGGGCC TCCAACTC TGCTGTGGAC   480
TGCATCAGGT CT                                                        492
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Seq ID NO: C160 DNA Sequence
Nucleic Acid Accession #: NM_005245.1
Coding sequence: 187..13959

1          11         21         31         41         51
|          |          |          |          |
CTGGGCGGCC GGGCGCGGGG AGAGGGCGCG GGAGCGGCTC GTGCGGCAGG TACCATGCGG    60
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        ACGCGCGAGC CCGGCGAGGC CCCGGCAGGC CCGTCCCTGC TCGGGGGCGC GCTGAGACGG    120
        CGGGTGAGCT CCACGAGAGC GCCGTCGCCA CTTCGGGCCA ACTTTGCGAT TCCCGACAGT    180
        TAAGCAATGG GGAGACATTT GGCTTTGCTC CTGCTTCTGC TCCTTCTCTT CCAACATTTT    240
        GGAGACAGTG ATGGCAGCCA ACGACTTGAA CAGACTCCTC TGCAGTTTAC ACACCTCGAG    300
        TACAACGTCA CCGTGCAGGA GAACTCTGCA GCTAAGACTT ATGTGGGGCA TCCTGTCAAG    360
        ATGGGTGTTT ACATTACACA TCCAGCGTGG GAAGTAAGGT ACAAAATTGT TTCCGGAGAC    420
        AGTGAAAACC TGTTCAAAGC TGAAGAGTAC ATTCTCGGAG ACTTTTGCTT TCTAAGAATA    480
        AGGACCAAAG GAGGAAATAC AGCTATTCTT AATAGAGAAG TGAAGGATCA CTACACATTG    540
        ATAGTGAAAG CACTTGAAAA AAATACTAAT GTGGAGGCGC GAACAAAGGT CAGGGTGCAG    600
        GTGCTGGATA CAAATGACTT GAGACCGTTA TTCTCACCCA CCTCATACAG CGTTTCTTTA    660
        CCTGAAAACA CAGCTATAAG GACCAGTATC GCAAGAGTCA GCGCCACGGA TGCAGACATA    720
        GGAACCAACG GGGAATTTTA CTACAGTTTT AAAGATCGAA CAGATATGTT TGCTATTCAC    780
        CCAACCAGTG GTGTGATAGT GTTAACTGGT AGACTTGATT ACCTAGAGAC CAAGCTCTAT    840
        GAGATGGAAA TCCTCGCTGC GGACCGTGGC ATGAAGTTGT ATGGGAGCAG TGGCATCAGC    900
        AGCATGGCCA AGCTAACGGT GCACATCGAA CAGGCCAATG AATGTGTCTCC GGTGATAACA    960
        GCAGTGACAT TGTCACCATC AGAACTGGAC AGGGACCCAG CATATGCAAT TGTGACAGTG   1020
        GATGACTGCG ATCAGGGTGC CAATGGTGAC ATAGCATCTT TAAGCATCGT GGCAGGTGAC   1080
        CTTCTCCAGC AGTTTAGAAC AGTGAGGTCC TTTCCAGGGA GTAAGGAGTA TAAAGTCAAA   1140
        GCCATGCGGTG ACATTGATTG GGACAGTCAT CCTTTCGGGCT ACAATCTCAC ACTACAGGCT   1200
        AAAGATAAAG GAACTCCGCC CCAGTTCTCT TCTGTTAAAG TCATTCACGT GACTTCTCCA   1260
        CAGTTCAAAG CCGGGCCAGT CAAGTTTGAA AAGGATGTTT ACAGAGCAGA AATAAGTGAA   1320
        TTTGCTCCTC CCAACACACC TGTGGTCATG GTAAAGGCCA TTCCTGCTTA TTCCCATTTG   1380
        AGGTATGTTT TTAAAAGGAC ACCTGGAAAA GCTAAATTCA GTTTAAATTA CAACACTGGT   1440
        CTCATTTCTA TTTTAGAACC AGTTAAAAGA CAGCAGGCAG CCCATTCTGA ACTTGAAGTA   1500
        ACAACAAGTG ACAGAAAAGC GTCCACCAAG GTCTTGGTGA AAGTCTTAGG TGCAAATGAC   1560
        AATCCCCCTG AATTTACCCA GACAGCGTAC AAAGCTGCTT TTGATGAGAA CGTGCCCATT   1620
        GGTACTACTA TCATGAGCCT GAGTGCCGTA GACCCTGATG AGGGTGAGAA TGGGGTACGTG   1680
        ACATACAGTA TCGCAAATTT AAATCATGTG CCGTTTGCGA TTGACCATTT CACTGGTACC   1740
        GTGAGTACGT CAGAAAACCT GGACTACGAA CTGATGCCTC GGGTTTATAC TCTGAGGATT   1800
        CGTGCATCAG ACTGGGGCTT GCCGTACCGC CGGGAAGTCG AAGTCCTTGC TACAATTACT   1860
        CTCAATAACT TGAATGACAA CACACCTTTG TTTGAGAAAA TAAATTGTGA AGGGACAATT   1920
        CCCAGAGATC TAGGCGTGGG AGAGCAAATA ACCACTGTTT CTGCTATTGA TGCAGATGAA   1980
        CTTCAGTTGG TACAGTATCA GATTGAAGCT GGAAATGAAC TGGATTGTT TAGTTTAAAC   2040
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        ATCAACATAA CAGTGGCTGC CAGTCACAAG CTGGTAAACT TGCAGTGTGA AGAGACTGGT   2220
        GTTGCCAAAA TGCTGGCAGA GAAGCTCCTG CAGGCAAATA AATTACACAA CCAGGGAGAG   2280
        GTGGAGGATA TTTTCTTCGA TTCTCACTGT GTCAATGCTC ACATACCGCA GTTTAGAAGC   2340
        ACTCTTCCGA CTGGTATTCA GGTAAAGGAA AACCAGCCTG TGGGTTCCAG TGTAATTTTC   2400
        ATGAACTCCA CTGACCTTGA CACTGGCTTC AATGGAAAAC TGGTCTATGC TGTTTCTGGA   2460
        GGAAATGAGG ATAGTTGCTT CATGATTGAT ATGGAAACAG GAATGCTGAA AATTTTATCT   2520
        CCTCTTGACC GTGAAACAAC AGACAAATAC ACCCTGAATA TTACCGTCTA TGACCTTGGG   2580
        ATACCCCAGA AGGCTGCGTG GCGTCTTCTA CATGTCGTGG TTGTCGATGC CAATGATAAT   2640
        CCACCCGAGT TTTTACAGGA GAGCTATTTT GTGGAAGTGA GTGAAGACAA GGAGGTACAT   2700
        AGTGAAATCA TCCAGGTTGA AGCCACAGAT AAAGACCTGG GGCCCAACGG ACACGTGACG   2760
        TACTCAATTC TTACAGACAC AGACACATTT TCAATTGACA GCGTGACGGG TGTTGTTAAC   2820
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        GACCAAGCCA GAGAAGAGCC TCAGCTGTTC TCCACTGTCG TTGTGAAAGT ATCACTAGAA   2940
        GATGTTAATG ACAACCCACC TACATTTATT CCACCTAATT ATCGTGTGAA AGTCCGAGAG   3000
        GATCTTCCAG AAGGAACCGT CATCATGTGG TTAGAAGCCC ACGATCCTGA TTTAGGTCAG   3060
        TCTGGTCAGG TGAGATACAG CCTTCTGGAC CACGGAGAAG GAAACTTCGA TGTGGATAAA   3120
        CTCAGTGGAG CAGTTAGGAC CGTCCAGCAG TTGGACTTTG AGAAGAAGCA AGTGTATAAT   3180
        CTCACTGTGA GGGCCAAAGA CAAGGGAAAG CCAGTTTCTC TGTCTTCTAC TTGCTATGTT   3240
        GAAGTTGAGG TGGTTGATGT GAATGAGAAC CTGCACCCAC CGTGTTTTC CAGCTTTGTG   3300
        GAAAAGGGGA CAGTGAAAGA AGATGCACCT GTTGGTTCAT TGGTAATGAC GGTGTCGGCT   3360
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        GTTGGTGTTT TCAAAATAGG TGAAGAGACA GGTGTCATAG AGACGTCAGA TCGACTGGAC   3480
        CGTGAATCGA CCTCCCATTA TTGGCTAACA GTCTTTGCAA CCGATCAGGG TGTCGTGCCT   3540
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        GTCCAGATCG AGGCATTTGA TCCAGATTCG AGCTCTAATG ACAAGCTCAT GTACAAAATT   3720
        ACAAGTGGAA ATCCACAAGG ATTCTTTTCA ATACATCCTA AAACAGGTCT CATCACAACT   3780
        ACGTCAAGGA AGCTAGACCG AGAACAGCAA GATGAACACA TATTAGAGGT TACTGTGACA   3840
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        GAAGAATCAT TTTTTACCTT TACTGTGATG GAAAGTGACC CGGTTGCTCA CATGGATTGGA   4320
        GTAATATCTG TGGAGCCTCC TGGCATACCC CTTTGGTTTG ACATCACTGG TGGCAACTAC   4380
        GACAGTCACT TCGATGTGGA CAAGGGAACT GGAACCATCA TTGTTGCCAA ACCTCTTGAT   4440
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        CTCACTCAGG TATTCATCAA AGTAATAGAC ACAAATGACC ATCGTCCTCA GTTTTCTACA   4560
        TCAAAGTATG AAGTTGTTAT TCCTGAAGAT ACAGCGCCAG AAACAGAAAT TTTGCAAATC   4620
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        GCCCCGTGGT TCACCGCCTTC CTCCTACAAA GGGCGGGTTT ATGAATCGGC AGCCGTTGGC   4920
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        TACTCGATCG AGTCAGGGAA TATTGGAAAT ATTGGAAATT CTTTTATGAT TGATCCTGTC   5040
        TTGGGCTCTA TTAAAAACTGC CAAAGAATTA GATCGAAGTA ACCAAGCGGA GTATGATTTA   5100
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                                    1297

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ATGGTAAAAG CTACAGATAA GGGCAGTCCA CCAATGAGTG AAATAACTTC TGTGCGTATC     5160
TTTGTCACAA TTGCTGACAA CGCCTCTCCG AAGTTTACAT CAAAAGAATA TTCTGTTGAA     5220
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TCAGTGGTGT ATGAAATAAA AGATGGAAAT ACAGGTGATG CTTTTGATAT TAATCCACAT     5340
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1298

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Seq ID NO: C162 DNA Sequence
Nucleic Acid Accession #: NM_003759.1
Coding sequence: 150..3257

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5    GCCACACATC ATGCTGATAA AATTCCTTTC CTTCAGTCAC TCGGTATGCC AAGTCCTCCT    3300
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     TTCGTCTCAG TTTTTGGTCA CAGGCCAAAT AATACAGCGC TCTCTCTGCT TCTCTCTTGC    3540
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        TGACCCTGGG GGCTCGTGAG GCTGCCACCG CTGCTGCCGC TACAGACCCA GCCTTGCACT   360
        CCAAGGCTGC GCACCGCCAG CCACTATCAT GTCCACTCCC GGGGTCAATT CGTCCGCCTC   420
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30      GAGGACTTTG CGAATATCAG AGACCTCAGA CTCTTCACAG GGTCAGGACT CAGAGAGTGT  1740
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        Nucleic Acid Accession #: NM_002659.1
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        TCGTATTTCC AGATGGATTT TGAGAGTGGA CAAGTGGATC CACTGGCATC TGTAATTTTG   240
        CCTCCAAACT TACTTGAGAA TTTAAGTCCA GAAGATTCTG TATTAGTTAG AAGAGCACAG   300
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  5   TTCATCAGCT ATATTGGGTG TGGAATATCT GCTATTTTTT CAGCAGCAAC TCTCCTGACA   720
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      CAAGGCTTAT TTATATTCAT CTTCCACTGT GCTATGAAGG AGAATGTTCA GAAACAGTGG  1440
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      CTCAGACAGT GCTTCCATGG ACAAGTCCTT GTCAAAACTG CTGCCATGCT ATGGAGATCA  1740
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 45   GAAGCTATTT GCCTGGCTCC AGCAGATGAT GAGATAATGA GGTAGTGGGT TTTTTATTAC  3000
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      Nucleic Acid Accession #: NM_000574.1
      Coding sequence: 66..1211

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      CCCCAGATGT ACCTAATGCC CAGCCAGCTT GGAAGGCGG TACAAGTTTT CCCGAGGATA   240
      CTGTAATAAC GTACAAATGT GAAGAAAGCT TTGTGAAAAT TCCTGGCGAG AAGGACTCAG   300
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     TTATTTCTGA ATCGAGATGT CCATAGTCAA ATTTGTAAAT CTTATTCTTT TGTAATATTT   1980
     ATTTATATTT ATTTATGACA GTGAACATTC TGATTTTACA TGTAAAACAA GAAAAGTTGA   2040
     AGAAGATATG TGAAGAAAAA TGTATTTTTC CTAAATAGAA ATAAATGATC CCATTTTTTG   2100
5    GT                                                                   2102
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Seq ID NO: C167 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence:1..2651

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10   |          |          |          |          |          |
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     GGGGGGCAGCT CTCCCAGGTC TGGTGTGTTG CTGAGGGGCT GCCCCACACA CTGTCATTGC   120
     GAGCCCGACG GCAGGATGTT GCTCAGGGTG GACTGCTCCG ACCTGGGGCT CTCGGAGCTG   180
15   CCTTCCAACC TCAGCGTCTT CACCTCCTAC CTAGACCTCA GTATGAACAA CATCAGTCAG   240
     CTGCTCCCGA ATCCCCTGCC CAGTCTCCGC TTCCTGGAGG AGTTACGTCT TGCGGGAAAC   300
     GCTCTGACAT ACATTCCCAA GGGAGCATTC ACTGGCCTTT ACAGTCTTAA AGTTCTTATG   360
     CTGCAGAATA ATCAGCTAAG ACACGTACCC ACAGAAGCTC TGCAGAATTT GCGAAGCCTT   420
     CAATCCCTGC GTCTGGATGC TAACCACATC AGCTATGTGC CCCCAAGCTG TTTCAGTGGC   480
20   CTGCATTCCC TGAGGCACCT GTGGCTGGAT GACAAATGCG TAACAGAAAT CCCCGTCCAG   540
     GCTTTTAGAA GTTTATCGGC ATTGCAAGCC ATGACCTTGG CCCTGAACAA AATACACCAC   600
     ATACCAGACT ATGCCTTTGG AAACCTCTCC AGCTTGGTAG TTCTACATCT CCATAACAAT   660
     AGAATCCACT CCCTGGGAAA GAAATGCTTT GATGGGCTCC ACAGCCTAGA GACTTTAGAT   720
     TTAAATTACA ATAACCTTGA TGAATTCCCC ACTGCAATTA GGACACTCTC CAACCTTAAA   780
25   GAACTACATT TCTATGACAA TCCCATCCAA TTTGTTGGGA GATCTGCTTT CTAACATTTA   840
     CCTGAACTAA GAACACTGAC TCTGAATGGT GCCTCACAAA TAACTGAATT TCCTGATTTA   900
     ACTGGAACTG CAAACCTGGA GAGTCTGACT TTAACTGGAG CACAGATCTC ATCTCTTCCT   960
     CAAACCGTCT GCAATTTCATT ACCTAATCTC CAAGTGCTAG ATCGTCTTA CAACCTATTA   1020
     GAAGATTTAC CCAGTTTTTC AGTCTGCCAA AAGCTTCAGA AAATTGACCT AAGACATAAT   1080
30   GAAATCTACG AAATTAAAGT TGACACTTTC CAGCAGTTGC TTAGCCTCCG ATCGCTGAAT   1140
     TTGGCTTGGA ACAAAATTGC TATTATTCAC CCCAATGCAT TTTCCACTTT GCCATCCCTA   1200
     ATAAAGCTGG ACCTATCGTC CAACCTCCTG TCGTCTTTTC CTATAACTGG GTTACATGGT   1260
     TTAACTCACT TAAAATTAAC AGGAAATCAT GCCTTACAGA GCTTGATATC ATCTGAAAAC   1320
     TTTCCAGAAC TCAAGGTTAT AGAAATGCCT TATGCTTACC AGTGCTGTGC ATTTGGAGTG   1380
35   TGTGAGAATG CCTATAAGAT TTCTAATCAA TGGAATAAAG GTGACAACAG CAGTATGGAC   1440
     GACCTTCATA AGAAAGATGC TGGAATGTTT CAGGCTCAAG ATGAACGTGA CCTTGAAGAT   1500
     TTCCTGCTTG ACTTTGAGGA AGACCTGAAA GCCCTTCATT CAGTGCAGTG TTCACCTTCC   1560
     CCAGGCCCCT TCAAACCCTG TGAACACCTG CTTGATGGCT GGCTGATCAG AATTGGAGTG   1620
     TGGACCATAG CAGTTCTGGC ACTTACTGT AATGCTTTG TGACTTCAAC AGTTTTCAGA   1680
40   TCCCCTCTGT ACATTTCCCC CATTAAACTG TTAATTGGGG TCATCGCAGC AGTGAACATG   1740
     CTCACGGGAG TCTCCAGTGC CGTGCTGGCT GGTGTGGATG CGTTCACTTT TGGCAGCTTT   1800
     GCACGACATG GTGCCTGGTG GGAGAATGGG GTTGGTTGCC ATGTCATTGG TTTTTTGTCC   1860
     ATTTTTGCTT CAGAATCATC TGTTTTCCTG CTTACTCTGG CAGCCCTGGA GCGTGGGTTC   1920
     TCTGTGAAAT ATTCTGCAAA ATTTGAAACG AAAGCTCCAT TTTCTAGCCT GAAAGTAATC   1980
45   ATTTTGCTCT GTGCCCTGCT GGCCTTGACC ATGGCCGCAG TTCCCCTGCT GGGTGGCAGC   2040
     AAGTATGGCG CCTCCCCTCT CTGCCTGCCT TTGCCCTTTTG GGGAGCCCAG CACCATGGGC   2100
     TACATGGTCG CTCTCATCTT GCTCAATTCC CTTTGCTTCC TCATGATGAC CATTGCCTAC   2160
     ACCAAGCTCT ACTGCAATTT GGACAAGGGA GACCTGGAGA ATATTTGGGA CTGCTCTATG   2220
     GTAAAACACA TTGCCCTGTT GCTCTTCACC AACTGCATCC TAAACTGCCC TGTGGCTTTC   2280
50   TTGTCCTTCT CCTCTTTAAT AAACCTTACA TTTATCAGTC CTGAAGTAAT TAAGTTTATC   2340
     CTTCTGGTGG TAGTCCCACT TCCTGCATGT CTCAATCCCC TTCTCTACAT CTTGTTCAAT   2400
     CCTCACTTTA AGGAGGATCT GGTGAGCCTG AGAAAGCAAA CCTACGTCTG GACAAGATCA   2460
     AAACACCCAA GCTTGATGTC AATTAACTCT GATGATGTCG AAAAACAGTC CTGTGACTCA   2520
     ACTCAAGCCT TGGTAACCTT TACCAGCTCC AGCATCCACTT ATGACCTGCC TCCCAGTTCC   2580
55   GTGCCCATCAC CAGCTTATCC AGTGACTGAG AGCTGCCATC TTTCCTCTGT GGCATTTGTC   2640
     CCATGTCTTA A                                                         2651
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Seq ID NO: C168 DNA Sequence
Nucleic Acid Accession #: NM_003667.2
Coding sequence: 49..2772

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     CGGCTCGGTG TGCTCCTGTC CTTGCCTGTG CTGCTGCAGC TGGCGACCGG GGGCAGCTCT   120
     CCCAGGTCTG GTGTGTTGCT GAGGGGCTGC CCCACACACT GTCATTGCGA GCCCGACGGC   180
     AGGATGTTGC TCAGGGTGGA CTGCTCCGAC CTGGGGCTCT CGGAGCTGCC TTCCAACCTC   240
     AGCGTCTTCA CCTCCTACCT AGACCTCAGT ATGAACAACA TCAGTCAGCT GCTCCCGAAT   300
70   CCCCTGCCCA GTCTCCGCTT CCTGGAGGAG TTACGTCTTG CGGGAAACGC TCTGACATAC   360
     ATTCCCAAGG GAGCATTCAC TGGCCTTTAC AGTCTTAAAG TTCTTATGCT GCAGAATAAT   420
     CAGCTAAGAC ACGTACCCAC AGAAGCTCTG CAGAATTTGC GAAGCCTTCA ATCCCTGCGT   480
     CTGGATGCTA ACCACATCAG CTATGTGCCC CCAAGCTGTT TCAGTGGCCT GCATTCCCTG   540
     AGGCACCTGT GGCTGGATGA CAATGCGTTA ACAGAAATCC CCGTCCAGGC TTTTAGAAGT   600
75   TTATCGGCAT TGCAAGCCAT GACCTTGGCC CTGAACAAAA TACACCACAT ACCAGACTAT   660
     GCCTTTGGAA ACCTCTCCAG CTTGGTAGTT CTACATCTCC ATAACAATAG AATCCACTCC   720
     CTGGGAAAGA AATGCTTTGA TGGGCTCCAC AGCCTAGAGA CTTTAGATTT AAATTACAAT   780
     AACCTTGATG AATTCCCCAC TGCAATTAGG ACACTCTCCA ACCTTAAAGA ACTAGGATTT   840
     CATAGCAACA ATATCAGGTC GATACCTGAG AAAGCATTTG TAGGCAACCC TTCTCTTATT   900
80   ACAATACATT TCTATGACAA TCCCATCCAA TTTGTTGGGA GATCTGCTTT CTAACATTTA   960
     CCTGAACTAA GAACACTGAC TCTGAATGGT GCCTCACAAA TAACTGAATT TCCTGATTTA   1020
     ACTGGAACTG CAAACCTGGA GAGTCTGACT TTAACTGGAG CACAGATCTC ATCTCTTCCT   1080
     CAAACCGTCT GCAATCAGTT ACCTAATCTC CAAGTGCTAG ATCGTCTTA CAACCTATTA   1140
     GAAGATTTAC CCAGTTTTTC AGTCTGCCAA AAGCTTCAGA AAATTGACCT AAGACATAAT   1200
     GAAATCTACG AAATTAAAGT TGACACTTTC CAGCAGTTGC TTAGCCTCCG ATCGCTGAAT   1260
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1304

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TTGGCTTGGA ACAAAATTGC TATTATTCAC CCCAATGCAT TTTCCACTTT GCCATCCCTA   1320
ATAAAGCTGG ACCTATCGTC CAACCTCCTG TCGTCTTTTC CTATAACTGG GTTACATGGT   1380
TTAACTCACT TAAAATTAAC AGGAAATCAT GCCTTACAGA GCTTGATATC ATCTGAAAAC   1440
TTTCCAGAAC TCAAGGTTAT AGAAATGCCT TATGCTTACC AGTGCTGTGC ATTTGGAGTG   1500
TGTGAGAATG CCTATAAGAT TTCTAATCAA TGGAATAAAG GTGACAACAG CAGTATGGAC   1560
GACCTTCATA AGAAAGATGC TGGAATGTTT CAGGCTCAAG ATGAACGTGA CCTTGAAGAT   1620
TTCCTGCTTG ACTTTGAGGA AGACCTGAAA GCCCTTCATT CAGTGCAGTG TTCACCTTCC   1680
CCAGGCCCCT TCAAACCCTG TGAACACCTG CTTGATGGCT GGCTGATCAG AATTGGAGTG   1740
TGGACCATAG CAGTTCTGGC ACTTACTTGT AATGCTTTGG TGACTTCAAC AGTTTTCAGA   1800
TCCCCTCTGT ACATTTCCCC CATTAAACTG TTAATTGGGG TCATCGCAGC AGTGAACATG   1860
CTCACGGGAG TCTCCAGTGC CGTGCTGGCT GGTGTGGATG CGTTCACTTT TGGCAGCTTT   1920
GCACGACATG GTGCCTGGTG GGAGAATGGG GTTGGTTGCC ATGTCATTGG TTTTTTGTCC   1980
ATTTTTGCTT CAGAATCATC TGTTTTCCTG CTTACTCTGG CAGCCCTGGA GCGTGGGTTC   2040
TCTGTGAAAT ATTCTGCAAA ATTTGAAACG AAAGCTCCAT TTTCTAGCCT GAAAGTAATC   2100
ATTTTGCTCT GTGCCCTGCT GGCCTTGACC ATGGCCGCAG TTCCCCTGCT GGGTGGCAGC   2160
AAGTATGGCG CCTCCCCTCT CTGCCTGCCT TTGCCTTTTG GGGAGCCCAG CCCCATGGGC   2220
TACATGGTCG CTCTCATCTT GCTCAATTCC CTTTGCTTCC TCATGATGAC CATTGCCTAC   2280
ACCAAGCTCT ACTGCAATTT GGACAAGGGA GACCTGGAGA ATATTTGGGA CTGCTCTATG   2340
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TTGTCCTTCT CCTCTTTAAT AAACCTTACA TTTATCAGTC CTGAAGTAAT TAAGTTTATC   2460
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CCTCACTTTA AGGAGGATCA GGTGAGCCTG AGAAAGCAAA CCTACGTCTG GACAAGATCA   2580
AAACACCCAA GCTTGATGTC AATTAACTCT GATGATGTCG AAAAACAGTC CTGTGACTCA   2640
ACTCAAGCCT TGGTAACCTT TACCAGCTCC AGCATCACTT ATGACCTGCC TCCCAGTTCC   2700
GTGCCATCAC CAGCTTATCC AGTGACTGAG AGCTGCCATC TTTCCTCTGT GGCATTTGTC   2760
CCATGTCTCT AATTAATATG TGAAGGAAAA TGTTTTCAAA GGTTGAGAAC CTGAAAATGT   2820
GAGATTGAGT ATATCAGAGC AGTAATTAAT AAGAAGAGCT GAGGTGAAAC TCGGTTTAAA   2880
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Seq ID NO: C169 DNA Sequence
Nucleic Acid Accession #: NM_003506.1
Coding sequence: 259..2379

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CTCATTTTCA GGAAAGCCTG AAAATGAGTA AAATAGTGAA ATGAGGAATT TGAACATTTT   180
ATCTTTGGAT GGGGATCTTC TGAGGATGCA AAGAGTGATT CATCCAAGCC ATGTGGTAAA   240
ATCAGGAATT TGAAGAAAAT GGAGATGTTT ACATTTTTGT TGACGTGTAT TTTTCTACCC   300
CTCCTAAGAG GGCACAGTCT CTTCACCTGT GAACCAATTA CTGTTCCCAG ATGTATGAAA   360
ATGGCCTACA ACATGACGTT TTTCCCTAAT CTGATGGGTC ATTATGACCA GAGTATTGCC   420
GCGGTGGAAA TGGAGCATTT TCTTCCTCTC GCAAATCTGG AATGTTCACC AAACATTGAA   480
ACTTTCCTCT GCAAAGCATT TGTACCAACC TGCATAGAAC AAATTCATGT GGTTCCACCT   540
TGTCGTAAAC TTTGTGAGAA AGTATATTCT GATTGCAAAA AATTAATTGA CACTTTTGGG   600
ATCCGATGGC CTGAGGAGCT TGAATGTGAC AGATTACAAT GTGTGATGA GACTGTTCCT    660
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AGAGACATTG GATTTTGGTG TCCAAGGCAT CTTAAGACTT CTGGGGGACA AGGATATAAG   780
TTTCTGGGAA TTGACCAGTG TGCGCCTCCA TGCCCCAACA TGTATTTTAA AAGTGATGAG   840
CTAGAGTTTG CAAAAAGTTT TATTGGAACA GTTTCAATAT TTTGTCTTTG TGCAACTCTG   900
TTCACATTCC TTACTTTTTT AATTGATGTT AGAAGATTCA GATACCCAGA GAGACCAATT   960
ATATATTACT CTGTCTGTTA CAGCATTGTA TCTCTTATGT ACTTCATTGG ATTTTTGCTG   1020
GGCGATAGCA CAGCCTGCAA TAAGGCAGAT GAGAAGCTAG AACTTGGTGA CACTGTTGTC   1080
CTAGGCTCTC AAAATAAGGC TTGCACCGTT TTGTTCATGC TTTTGTATTT TTTCACAATG   1140
GCTGCACTG TGTGGTGGGT GATTCTTACC ATTACTTGGT TCTTAGCTGC AGGAAGAAAA    1200
TGGAGTTGTG AAGCCATCGA GCAAAAAGCA GTGTGGTTTC ATGCTGTTGC ATGGGGAACA   1260
CCAGGTTTCC TGACTGTTAT GCTTCTTGCT CTGAACAAAG TTGAAGGAGA CAACATTAGT   1320
GGAGTTTGCT TTGTTGGCCT TTATGACCTG GATGCTTCTC GCTACTTTGT ACTCTTGCCA   1380
CTGTGCCTTT GTGTGTTTGT TGGGCTCTCT CTTCTTTTAG CTGGCATTAT TTCCTTAAAT   1440
CATGTTCGAC AAGTCATACA ACATGATGGC CGGAACCAAG AAAAACTAAA GAAATTTATG   1500
ATTCGAATTG GAGTCTTCAG CGGCTTGTAT CTTGTGCCAT TAGTGACACT TCTGGGATGT   1560
TACGTCTATG AGCAAGTGAA CAGGATTACC TGGGAGATAA CTTGGGTCTC TGATCATTGT   1620
CGTCAGTACC ATATCCCATG TCCTTATCAG GCAAAAGCAA AAGCTCGACC AGAATTGGCT   1680
TTATTTATGA TAAAATACCT GATGACATTA ATTGTTGGCA TCTCTGCTGT CTTCTGGGTT   1740
GGAAGCAAGA AGACATGCAC AGAATGGGCT GGGTTTTTTA AACGAAATCG CAAGAGAGAT   1800
CCAATCAGTG AAAGTGGAAG AGTACTACAG GAATCATGTG AGTTTTTCTT AAAGCACAAT   1860
TCTAAAGTTA AACACAAAAA GAAGCACTAT AAACCAAGTT CACACAAGCT GAAGGTCATT   1920
TCCAAATCCA TGGGAACCAG CACAGGAGCT ACAGCAAATC ATGGCACTTC TGCAGTAGCA   1980
ATTACTAGCC ATGATTACCT AGGACAAGAA ACTTTGCACG AAATCCAAAC CTCACCAGAA   2040
ACATCAATGA GAGAGGTGAA AGCGGACGGA GCTAGCACCC CCAGGTTAAG AGAACAGGAC   2100
TGTGGTGAAC CTGCCTCGCC AGCAGCATCC ATCTCCAGAC TCTCTGGGGA ACAGGTCGAC   2160
GGGAAGGGCC AGGCAGGCAG TGTATCGAA AGTGCGCGGA GTGAAGGAAG GATTAGTCCA    2220
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TCAGAACCAA GCAGCCTCAA AGGTTCCACA TCTCTGCTTG TTCACCCAGT TTCAGGAGTG   2340
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CAGAAGCAAA TTTGTGTTAC ACTGGAAGTG ACCTATGCAC TGTTTTGTAA GAATCACTGT   2460
TACGTTCTTC TTTTGCACTT AAAGTTGCAT TGCCTACTGT TATATCTGAA AAAATAGAGT   2520
TCAAGAATAA TATGACTCAT TTCACACAAA GGTTAATGAC AACAATATAC CTGAAAACAG   2580
AAATGTGCAG GTTAATAATA TTTTTTTTAAT AGTGTGGGAG GACAGAGTTA GAGGAATCTT  2640
CCTTTTCTAT TTATGAAGAT TCTACTCTTG GTAAGAGTAT TTTAAGATGT ACTATGCTAT   2700
TTTACCTTTT TGATATAAAA TCAAGATATT TCTTTGCTAA AGTATTTAAA TCTTATCCTT   2760
GTATCTTTTT ATACATATTT GAAAATAAGC TTATATGTAT TTGAACTTTT TTGAAATCCT   2820
ATTCAAGTAT TTTTATCATG CTATTGTGAT ATTTTAGCAC TTTGGTAGCT TTTACACTGA   2880
ATTTCTAAGA AAATTGTAAA ATAGTCTTCT TTTATACTGT AAAAAAAGAT ATACCAAAAA   2940
GTCTTATAAT AGGAATTTAA CTTTAAAAAC CCACTTATTG ATACCTTACC ATCTAAAATG   3000
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        TGTGATTTTT ATAGTCTCGT TTTAGGAATT TCACAGATCT AAATTATGTA ACTGAAATAA   3060
        GGTGCTTACT CAAAGAGTGT CCACTATTGA TTGTATTATG CTGCTCACTG ATCCTTCTGC   3120
        ATATTTAAAA TAAAATGTCC TAAAGGGTTA GTAGACAAAA TGTTAGTCTT TTGTATATTA   3180
5       GGCCAAGTGC AATTGACTTC CCTTTTTTAA TGTTTCATGA CCACCCATTG ATTGTATTAT   3240
        AACCACTTAC AGTTGCTTAT ATTTTTTGTT TTAACTTTTG TTTCTTAACA TTTAGAATAT   3300
        TACATTTTGT ATTATACAGT ACCTTTCTCA GACATTTTGT AG                      3342
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Seq ID NO: C170 DNA Sequence
Nucleic Acid Accession #: NM_000582
Coding sequence: 88..990

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        GGCATCACCT GTGCCATACC AGTTAAACAG GCTGATTCTG GAAGTTCTGA GGAAAAGCAG    180
        CTTTACAACA AATACCCAGA TGCTGTGGCC ACATGGCTAA ACCCTGACCC ATCTCAGAAG    240
        CAGAATCTCC TAGCCCCACA GACCCTTCCA AGTAAGTCCA ACGAAAGCCA TGACCACATG    300
        GATGATATGG ATGATGAAGA TGATGATGAC CATGTGGACA GCCAGGACTC CATTGACTCG    360
        AACGACTCTG ATGATGTAGA TGACACTGAT GATTCTCACC AGTCTGATGA GTCTCACCAT    420
        TCTGATGAAT CTGATGAACT GGTCACTGAT TTTCCCACGG ACCTGCCAGC AACCGAAGTT    480
        TTCACTCCAG TTGTCCCCAC AGTAGACACA TATGATGGCC GTGGTTTAT  GTGTGGTTTAT    540
        GGACTGAGGT CAAAATCTAA GAAGTTTCGC AGACCTGACA TCCAGTACCC TGATGCTACA    600
        GACGAGGACA TCACCTCACA CATGGAAAGC GAGGAGTTGA ATGGTGCATA CAAGGCCATC    660
        CCCGTTGCCC AGGACCTGAA CGCCGCCTTCT GATTGGGACA GGACAGTTAT               720
        GAAACGAGTC AGCTGGATGA CCAGAGTGCT GAAACCCACA GCCACAAGCA GTCCAGATTA    780
        TATAAGCGGA AAGCCAATGA TGAGAGCAAT GAGCATTCCG ATGTGATTGA TAGTCAGGAA    840
        CTTTCCAAAG TCAGCCGTGA ATTCCACAGC CATGAATTTC ACAGCCATGA AGATATGCTG    900
        GTTGTAGACC CCAAAAGTAA GGAAGAAGAT AAACACCTGA AATTTCGTAT TTCTCATGAA    960
        TTAGATAGTG CATCTTCTGA GGTCAATTAA AAGGAGAAAA AATACAATTT CTCACTTTGC   1020
        ATTTAGTCAA AAGAAAAAAT GCTTTATAGC AAAATGAAAG AGAACATGAA ATGCTTCTTT   1080
        CTCAGTTTAT TGGTTGAATG TGTATCTATT TGAGTCTGAA AATAACTAAT GTGTTTGATA   1140
        ATTAGTTTAG TTTGTGGCTT CATGGAAACT CCCTGTAAAC TAAAAGCTTC AGGGTTATGT   1200
        CTATGTTCAT TCTATAGAAG AAATGCAAAC TATCACTGTA TTTTAATATT TGTTATTCTC   1260
        TCATGAATAG AAATTTATGT AGAAGCAAAC AAAATACTTT TACCCACTTA AAAAGAGAAT   1320
        ATAACATTTT ATGTCACTAT AATCTTTTGT TTTTTAAGTT AGTGTATATT TTGTTGTGAT   1380
        TATCTTTTTG TGGTGTGAAT AAATCTTTTA TCTTGAATGT AATAAGAATT TGGTGGTGTC   1440
        AATTGCTTAT TTGTTTTCCC ACGGTTGTCC AGCAATTAAT AAAACATAAC CTTTTTTACT   1500
        GCCTAAAAAA AAAAAAAAAA AAAA                                          1524
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Seq ID NO: C171 DNA Sequence
Nucleic Acid Accession #: NM_002821
Coding sequence: 150..3362

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        CCTCAGCTCC TTTTCCTGAG CCCGCCGCGA TGGGAGCTGC CCGGGGATCC CCGGCCAGAC    180
        CCCGCCGGTT GCCTCTGCTC AGCGTCCTGC TGCTGCCGCT GCTGGGCGGT ACCCAGACAG    240
        CCATTGTCTT CATCAAGCAG CCGTCCTCCC AGGATGCACT GCAGGGGCGC CGGGCGCTGC    300
        TTCGCTGTGA GGTTGAGGCT CCGGGCCCGG TACATGTGTA CTGGGCTCTC GATGGGGCCC    360
        CTGTCCAGGA CACGGAGCGG CGTTTCGCCC AGGGCAGCAG CCTGAGCTTT GCAGCTGTGG    420
        ACCGGCTGCA GGACTCTGGC ACCTTCCAGT GTGTGGCTCG GGATGATGTC ACTGGAGAAG    480
        AAGCCCGCAG TGCCAACGCC TCCTTCAACA TCAAATGGAT TGAGGCAGGT CCTGTGGTCC    540
        TGAAGCATCC AGCCTCGGAA GCTGAGATCC AGCCACAGAC CCAGGTCACA CTTCGTTGCC    600
        ACATTGATGG GCACCCTCGG CCCACCTACC AATGGTTCCG AGATGGGACC CCCCTTTCTG    660
        ATGGTCAGAG CAACCACACA GTCAGCAGCA AGGAGCGGAA CCTGACGCTC CGGCCAGCTG    720
        GTCCTGAGCA TAGTGGGCTG TATTCCTGCT GCGCCCACAG TGCTTTTGGC CAGGCTTGCA    780
        GCAGCCAGAA CTTCACCTTG AGCATTGCTG ATGAAAGCTT TGCCAGGGTG GTGCTGGCAC    840
        CCCAGGACGT GGTAGTAGCG AGGTATGAGG AGGCCATGTT CCATTGCCAG TTCTCAGCCC    900
        AGCCACCCCC GAGCCTGCAG TGGCTCTTTG AGGATGAGAC TCCCATCACT AACCGCAGTC    960
        GCCCCCCACA CCTCCGCAGA GCCACAGTGT TTGCCAACGG TTCTCTGCTG CTGACCCAGG   1020
        TCCGGCCACG CAATGCAGGG ATCTACCGCT GCATTGGCCA GGGGCAGAGG GGCCCACCCA   1080
        TCATCCTGGA AGCCACACTT CACCTAGCAG AGATTGAAGA CATGCCGCTA TTTGAGCCAC   1140
        GGGTGTTTAC AGCTGGCAGC GAGGAGCGTG TGACCTGCCT TCCCCCCAAG GGTCTGCCAG   1200
        AGCCCAGCGT GTGGTGGGAG CACGCGGGAG TCCGGCTGCC CACCCATGGC AGGGTCTACC   1260
        AGAAGGGCCA CGAGCTGGTG TTGGCCAATA TTGCTGAAAG TGATGCTGGT GTCTACACCT   1320
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        TGCCCTCCTG GCTGAAGAAG CCCCAAGACA GCCAGCTGGA GGAGGGCAAA CCCGGCTACT   1440
        TGGATTGCCT GACCCAGGCC ACACCAAAAC CTACAGTTGT CTGGTACAGA AACCAGATGC   1500
        TCATCTCAGA GGACTCACGG TTCGAGGTCT TCAAGAATGG GACCTTGCGC ATCAACAGCG   1560
        TGGAGGTGTA TGATGGGACA TGGTACCGTT GTATGAGCAG CACCCCAGCC GGCAGCATCG   1620
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        AGCAGTGCAT GGAGTTTGAC AAGGAGGCCA CGGTGCCCTG TTCAGCCACA GGCCGAGAGA   1740
        AGCCCACTAT TAAGTGGGAA CGGGCAGATG GGAGCAGCCT CCCAGAGTGG GTGACAGACA   1800
        ACGCTGGCAC CCTGCATTTT GCCCGGGTGA CTCGAGATGA CGCTGGCAAC TACACTTGCA   1860
        TTGCCTCCAA CGGGCGCGAG GGCCAGATTC GTGCCCATGT CCAGCTCACT GTGGCAGTTT   1920
        TTATCACCTT CAAAGTGGAA CCAGAGCGTA CGACTGTGTA CCAGGGCCAC ACAGCCCTAC   1980
        TGCAGTGCGA GGCCCAGGGG ACCCCAAGC CGCTGATTCA GTGGAAAGGC AAGGACCGCA   2040
        TCCTGGACCC CACCAAGCTG GGACCCAGGA TGCACATCTT CCAGAATGGC TCCCTGGTGA   2100
        TCCATGACGT GGCCCCTGAG GACTCAGGCC GCTACACCTG CATTGCAGGC AACAGCTGCA   2160
        ACATCAAGCA CACGGAGGCC CCCCTCTATG TCGTGGACAA GCCTGTGCCG GAGGAGTCGG   2220
        AGGGCCCTGG CAGCCCTCCC CCCTACAAGA TGATCCAGAC CATTGGGTTG TCGGTGGGTG   2280
        CCGCTGTGGC CTACATCATT GCCGTGCTGG GCCTCATGTT CTACTGCAAG AAGGCTGCA    2340
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     AAGCCAAGCG GCTGCAGAAG CAGCCCGAGG GCGAGGAGCC AGAGATGGAA TGCCTCAACG   2400
     GAGGGCCTTT GCAGAACGGG CAGCCCTCAG CAGAGATCCA AGAAGAAGTG GCCTTGACCA   2460
     GCTTGGGCTC CGGCCCCGCG GCCACCAACA AACGCCACAG CACAAGTGAT AAGATGCACT   2520
     TCCCACGGTC TAGCCTGCAG CCCATCACCA CGCTGGGGAA GAGTGAGTTT GGGGAGGTGT   2580
     TCCTGGCAAA GGCTCAGGGC TTGGAGGAGG GAGTGGCAGA GACCCTGGTA CTTGTGAAGA   2640
     GCCTGCAGAC GAAGGATGAG CAGCAGCAGC TGGACTTCCG GAGGGAGTTG GAGATGTTTG   2700
     GGAAGCTGAA CCACGCCAAC GTGGTGCGGC TCCTGGGGCT GTGCCGGGAG GCTGAGCCCC   2760
     ACTACATGGT GCTGGAATAT GTGGATCTGG GAGACCTCAA GCAGTTCCTG AGGATTTCCA   2820
     AGAGCAAGGA TGAAAAATTG AAGTCACAGC CCCTCAGCAC CAAGCAGAAG GTGGCCCTAT   2880
     GCACCCAGGT AGCCCTGGGC ATGGAGCACC TGTCCAACAA CCGCTTTGTG CATAAGGACT   2940
     TGGCTGCGCG TAACTGCCTG GTCAGTGCCC AGAGACAAGT GAAGGTGTCT GCCCTGGGCC   3000
     TCAGCAAGGA TGTGTACAAC AGTGAGTACT ACCACTTCCG CCAGGCCTGG GTGCCGCTGC   3060
     GCTGGATGTC CCCCGAGGCC ATCCTGGAGG GTGACTTCTC TACCAAGTCT GATGTCTGGG   3120
     CCTTCGGTGT GCTGATGTGG GAAGTGTTTA CACATGGAGA GATGCCCCAT GGTGGGCAGG   3180
     CAGATGATGA AGTACTGGCA GATTTGCAGG CTGGGAAGGC TAGACTTCCT CAGCCCGAGG   3240
     GCTGCCCTTC CAAACTCTAT CGGCTGATGC AGCGCTGCTG GGCCCTCAGC CCCAAGGACC   3300
     GGCCCTCCTT CAGTGAGATT GCCAGCGCCC TGGGAGACAG CACCGTGGAC AGCAAGCCGT   3360
     GAGGAGGGAG CCCGCTCAGG ATGGCCTGGG CAGGGGAGGA CATCTCTAGA GGGAAGCTCA   3420
     CAGCATGATG GGCAAGATCC CTGTCCTCCT GGGCCCTGAG GTGCCCTAGT GCAACAGGCA   3480
     TTGCTGAGGT CTGAGCAGGG CCTGGCCTTT CCTCCTCTTC CTCACCCTCA TCCTTTGGGA   3540
     GGCTGACTTG GACCCAAACT GGGCGACTAG GGCTTTGAGC TGGGCAGTTT CCCCTGCCAC   3600
     CTCTTCCTCT ATCAGGGACA GTGTGGGTGC CACAGGTAAC CCCAATTTCT GGCCTTCAAC   3660
     TTCTCCCCTT GACCGGGTCC AACTCTGCCA CTCATCTGCC AACTTTGCCT GGGGAGGGCT   3720
     AGGCTTGGGA TGAGCTGGGT TTGTGGGGAG TTCCTTAATA TTCTCAAGTT CTGGGCACAC   3780
     AGGGTTAATG AGTCTCTTGC CCACTGGTCC ACTTGGGGGT CTAGACCAGG ATTATAGAGG   3840
     ACACAGCAAG TGAGTCCTCC CCACTCTGGG CTTGTGCACA CTGACCCAGA CCCACGTCTT   3900
     CCCCACCCTT CTCTCCTTTC CTCATCCTAA GTGCCTGGCA GATGAAGGAG TTTTCAGGAG   3960
     CTTTTGACAC TATATAAACC GCCCTTTTTG TATGCACCAC GGGCGGCTTT TATATGTAAT   4020
     TGCAGCGTGG GGTGGGTGGG CATGGGAGGT AGGGGTGGGC CCTGGAGATG AGGAGGGTGG   4080
     GCCATCCTTA CCCCACACTT TTATTGTTGT CGTTTTTTGT TTGTTTTGTT TTTTTGTTTT   4140
     TGTTTTTGTT TTTACACTCG CTGCTCTCAA TAAATAAGCC TTTTTTA                 4187
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Seq ID NO: C172 DNA Sequence
Nucleic Acid Accession #: NM_002309.2
Coding sequence: 65..673

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     CATAATGAAG GTCTTGGCGG CAGGAGTTGT GCCCCTGCTG TTGGTTCTGC ACTGGAAACA   120
     TGGGGCGGGG AGCCCCCTCC CCATCACCCC TGTCAACGCC ACCTGTGCCA TACGCCACCC   180
     ATGTCACAAC AACCTCATGA ACCAGATCAG GAGCCAACTG GCACAGCTCA ATGGCAGTGC   240
     CAATGCCCTC TTTATTCTCT ATTACACAGC CCAGGGGGAG CCGTTCCCCA ACAACCTGGA   300
     CAAGCTATGT GGCCCCAACG TGACGGACTT CCCGCCCTTC CACGCCAACG GCACGGAGAA   360
     GGCCAAGCTG GTGGAGCTGT ACCGCATAGT CGTGTACCTT GGCACCTCCC TGGGCAACAT   420
     CACCCGGGAC CAGAAGATCC TCAACCCCAG TGCCCTCAGC CTCCACAGCA AGCTCAACGC   480
     CACCGCCGAC ATCCTGCGAG GCCTCCTTAG CAACGTGCTG TGCCGCCTGT GCAGCAAGTA   540
     CCACGTGGGC CATGTGGACG TGACCTACGG CCCTGACACC TCGGGTAAGG ATGTCTTCCA   600
     GAAGAAGAAG CTGGGCTGTC AACTCCTGGG GAAGTATAAG CAGATCATCG CCGTGTTGGC   660
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     GTCCAGATGT GGGGGCCTGT CCAAGGGTGG CTGGGGCCCA GGGCATCGGT AAACCCAAAT   780
     GGGGGCTGCT GGCAGACCCG GAGGGTGCCT GGCCAGTCCA CTCCACTCTG GGCTGGGCTG   840
     TGATGAAGCT GAGCAGAGTG GAAACTTCCA TAGGGAGGGA GCTAGAAGAA GGTGCCCCTT   900
     CCTCTGGGAG ATTGTGGACT GGGGGAGCGTG GGCTGGACTT CTGCCTCTAC TTGTCCCTTT   960
     GGCCCCTTGC TCACTTTGTG CAGTGAACAA ACTACACAAG TCATCTACAA GAGCCCTGAC   1020
     CACAGGGTGA GACAGCAGGG CCCAGGGGAG TGGACCAGCC CCAGCAAAT TATCACCATC    1080
     TGTGCCTTTG CTGCCCCTTA GGTTGGGACT TAGGTGGGCC AGAGGGGCTA GGATCCCAAA   1140
     GGACTCCTTG TCCCCTAGAA GTTTGATGAG TGGAAGATAG AGAGGGGCCT CTGGGATGGA   1200
     AGGCTGTCTT CTTTTGAGGA TGATCAGAGA ACTTGGGCAT AGGAACAATC TGGCAGAAGT   1260
     TTCCAGAAGG AGGTCACTTG GCATTCAGGC TCTTGGGGAG GCAGAGAAGC CACCTTCAGG   1320
     CCTGGGAAGG AAGACACTGG GAGGAGGAGA GGCCTGGAAA GCTTTGGTAG GTTCTTCGTT   1380
     CTCTTCCCCG TGATCTTCCC TGCAGCCTGG GATGGCCAGG GTCTGATGGC TGGACCTGCA   1440
     GCAGGGGTTT GTGGAGGTGG GTAGGGCAGG GGCAGGTTGC TAAGTCAGGT GCAGAGGTTC   1500
     TGAGGGACCC AGGCTCTTCC TCTGGGTAAA GGTCTGTAAG AAGGGGCTGG GGTAGCTCAG   1560
     AGTAGCAGCT CACATCTGAG GCCCTGGGAG GTCTTGTGAG GTCACACAGA GGTACTTGAG   1620
     GGGGACTGGA GGCCGTCTCT GGTCCCCAGG GCAAGGGAAC AGCAGAACTT AGGGTCAGGG   1680
     TCTCAGGGAA CCCTGAGCTC CAAGCGTGCT GTGCGTCTGA CCTGGCATGA TTTCTATTTA   1740
     TTATGATATC CTATTTATAT TAACTTATTG GTGCTTTCAG TGGCCAAGTT AATTCCCCTT   1800
     TCCCTGGTCC CTACTCAACA AAATATGATG ATGGCTCCCG ACACAAGCAC CAGGGCCAGG   1860
     GCTTAGCAGG GCCTGGTCTG GAAGTCGACA ATGTTACAAG TGGAATAAGC TTACGGGTGA   1920
     AGCTCAGAGA AGGGTCGGAT CTGAGAGAAT GGGGAGGCCT GAGTGGGAGT GGGGGGGCCTT  1980
     GCTCCACCCC CATCCCCTAC TGTGACTTGC TTTAGCGTGT CAGGGTCCAG GCTGCAGGGG   2040
     CTGGGCCAAT TTGTGGGAGAG GCCGGGTGCC TTTCTGTCTT GCTTCCAGGG GGCTGGTTCA   2100
     CACTGTTCTT GGGCGCCCCA GCATTGTGTT GTGAGGCGCA CTGTTCCTGG CAGATATTGT   2160
     GCCCCCTGGA GCAGTGGGCA AGACAGTCCT TGTGGCCCAC CCTGTCCTTG TTTCTGTGTC   2220
     CCCATGCTGC CTCTGAAATA GCGCCCTGGA ACAACCCTGC CCCTGCTACC AGCATGCTCC   2280
     GACACAGCAG GGAAGCTCCT CCTGTGGCCC GGACACCCAT AGACGGTGCG GGGGGCCTGG   2340
     CTGGGCCAGA CCCCAGGAAG GTGGGGTAGA CTGGGGGGAT CAGCTGCCCA TTGCTCCCAA   2400
     GAGGAGGAGA GGGAGGCTGC AGACGCCTGG GACTCAGACC AGGAAGCTGT GGGCCCTCCT   2460
     GCTCCACCCC CATCCCACTC CCACCCATGT CTGGGCTCCC AGGCAGGGAA CCCGATCTCT   2520
     TCCTTTGTGC TGGGGCCAGG CGAGTCGGAGA AACGCCCTCC AGTCTGAGAG CAGGGGAGGG   2580
     AAGGAGGCAG CAGAGTTGGG GCAGCTGCTC AGAGCAGTGT TCTGGCTTCT TCTCAAACCA   2640
     TGAGCGGGCT GCCGGCCTCC AAGTTCCTCC GACAAGATGA TGGTACTAAT TATGGTACTT   2700
     TTCACTCACT TTGCACCTTT CCCTGTCGCT CTCTAAGCAC TTTACCTGGA TGGCGCGTGG   2760
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          CCATCTGTCC ATCCCAACAG CAAGACGAGG ATGTGGCTGT TGAGATGTGG GCCACACTCA  2880
          CCCTTGTCCA GGATGCAGGG ACTGCCTTCT CCTTCCTGCT TCATCCGGCT TAGCTTGGGG  2940
          CTGGCTGCAT TCCCCCAGGA TGGGCTTCGA GAAAGACAAA CTTGTCTGGA AACCAGAGTT  3000
          GCTGATTCCA CCCGGGGGGC CCGGCTGACT CGCCCATCAC CTCATCTCCC TGTGGACTTG  3060
          GGAGCTCTGT GCCAGGCCCA CCTTGCGGCC CTGGCTCTGA GTCGCTCTCC CACCCAGCCT  3120
          GGACTTGGCC CCATGGGACC CATCCTCAGT GCTCCCTCCA GATCCCGTCC GGCAGCTTGG  3180
          CGTCCACCCT GCACAGCATC ACTGAATCAC AGAGCCTTTG CGTGAAACAG CTCTGCCAGG  3240
          CCGGGAGCTG GGTTTCTCTT CCCTTTTTAT CTGCTGGTGT GGACCACACC TGGGCCTGGC  3300
          CGGAGGAAGA GAGAGTTTAC CAAGAGAGAT GTCTCCGGGC CCTTATTTAT TATTTAAACA  3360
          TTTTTTTAAA AAGCACTGCT AGTTTACTTG TCTCTCCTCC CCATCGTCCC CATCGTCCTC  3420
          CTTGTCCCTG ACTTGGGGCA CTTCCACCCT GACCCAGCCA GTCCAGCTCT GCCTTGCCGG  3480
          CTCTCCAGAG TAGACATAGT GTGTGGGGTT GGAGCTCTGG CACCCGGGGA GGTAGCATTT  3540
          CCCTGCAGAT GGTACAGATG TTCCTGCCTT AGAGTCATCT CTAGTTCCCC ACCTCAATCC  3600
          CGGCATCCAG CCTTCAGTCC CGCCCACGTG CTAGCTCCGT GGCCCCACCG TGCGGCCTTA  3660
          GAGGGTTTCCC TCCTTCCTTT CCACTGAAAA GCACATGGCC TTGGGTGACA AATTCCTCTT  3720
          TGATGAATGT ACCCTGTGGG GATGTTTCAT ACTGACAGAT TATTTTTATT TATTCAATGT  3780
          CATATTTAAA ATATTTATTT TTTATACCAA ATGAATCACT TTTTTTTTTA AGAAAAAAAA  3840
          GAGAAATGAA TAAAGAATCT ACTCTTCG                                      3868
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Seq ID NO: C173 DNA Sequence
Nucleic Acid Accession #: XM_097508
Coding sequence: 44..2788

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          GACACTTGTT TGTCACGTGT CAATAATCAT CTCTGCCCGG GACCTCAGCA TGAACAACCT  120
          CACAGAGCTT CAGCCTGCCC TCTTCCACCA CCTGCGCTTC TTGGAGGAGC TGCGTCTCTC  180
          TGGGAACCAT CTCTCACACA TCCCAGGACA AGCATTCTCT GGTCTCTACA GCCTGAAAAT  240
          CCTGATGCTG CAGAACAATC AGCTGGGAGG AATCCCCGCA GAGGCGCTGT GGGAGCTGCC  300
          GAGCCTGCAG TCGCTGCGCC TAGATGCCAA CCTCATCTCC CTGGTCCCGG AGAGGGAGCTT  360
          TGAGGGGCTG TCCTCCCTCC GCCACCTCTG GCTGGACGAC AATGCACTCA CGGAGATCCC  420
          TGTCAGGGCC CTCAACAACC TCCCTGCCCT GCAGGCCATG ACCCTGGCCC TCAACCGCAT  480
          CAGCCACATC CCCGACTACG CGTTCCAGAA TCTCACCAGC CTTGTGGTGC TGCATTTGCA  540
          TAACAACCGC ATCCAGCATC TGGGGACCCA CAGCTTCGAG GGGCTGCACA ATCTGGAGAC  600
          ACTAGACCTG AATTATAACA AGCTGCAGGA GTTCCCTGTG GCCATCCGGA CCCTGGGCAG  660
          ACTGCAGGAA CTGGGGTTCC ATAACAACAA CATCAAGGCC ATCCCAGAAA AGGCCTTCAT  720
          GGGGAACCCT CTGCTACAGA CGATACACTT TTATGATAAC CCAATCCAGT TTGTGGGAAG  780
          ATCGGCATTC CAGTACCTGC CTAAACTCCA CACACTATCT CTGAATGGTG CCATGGACAT  840
          CCAGGAGTTT CCAGATCTCA AAGGCACCAC CAGCCTGGAG ATCCTGACCC TGACCCGCGC  900
          AGGCATCCGG CTGCTCCCAT CGGGGATGTG CCAACAGCTG CCCAGGCTCC GAGTCCTGGA  960
          ACTGTCTCAC AATCAAATTG AGGAGCTGCC CAGCCTGCAC AGGTGTCAGA AATTGGAGGA  1020
          AATCGGCCTC CAACACAACC GCATCTGGGA AATTGGAGCT GACACCTTCA GCCAGCTGAG  1080
          CTCCCTGCAA GCCCTGGATC TTAGCTGGAA CGCCATCCGG TCCATCCACC CCGAGGCCTT  1140
          CTCCACCCTG CACTCCCTGG TCAAGCTGGA CCTGACGAGC AACCAGCTGA CCACACTGCC  1200
          CCTGCTGGA CTTGGGGGCT TGATGCATCT GAAGCTCAAA GGGAACCTTG CTCTCTCCCA  1260
          GGCCTTCTCC AAGGACAGTT TCCCAAAACT GAGGATCCTG GAGGTGCCTT ATGCCTACCA  1320
          GTGCTGTCCC TATGGGATGT GTGCCAGCTT CTTCAAGGCC TCTGGGCAGT GGGAGGCTGA  1380
          AGACCTTCAC CTTGATGATG AGGAGTCTTC AAAAAGGCCC CTGGGCCTCC TTGCCAGACA  1440
          AGCAGAGAAC CACTATGACC AGGACCTGGA TGAGCTCCAG CTGGAGATGG AGGACTCAAA  1500
          GCCACACCCC AGTGTCCAGT GTAGCCCTAC TCCAGGCCCC TTCAAGCCCT GTGAGTACCT  1560
          CTTTGAAAGC TGGGGCATCC GCCTGGCCGT GTGGGCCATC GTGTTGCTCT CCGTGCTCTG  1620
          CAATGGACTG GTGCTGCTGA CCGTGTTCGC TGGCGGGCCT GTCCCCCTGC CCCCGGTCAA  1680
          GTTTGTGGTA GGTGCGATTG CAGGCGGCCA CACCTTGACT GGCATTTCCT GTGGCCTTCT  1740
          AGCCTCAGTC GATGCCCTGA CCTTTGGTCA GTTCTCTGAG TACGGAGCCC GCTGGGAGAC  1800
          GGGGCTAGGC TGCCGGGCCA CTGGCTTCCT GGCAGTACTT GGGTCGGAGG CATCGGTGCT  1860
          GCTGCTCACT CTGGCCGCAG TGCAGTGCAG CGTCTCCGTC TCCTGTGTCC GGGCCTATGG  1920
          GAAGTCCCCC TCCCTGGGCA GCGTTCGAGC AGGGGTCCTA GGCTGCCTGG CACTGGCAGG  1980
          GCTGGCCGCC GCGCTGCCCC TGGCCTCAGT GGGAGAAATAC CTGGGCCTCC CACTCTGCCT  2040
          GCCCTACGCG CCACCTGAGG GTCAGCCAGC AGCCCTGGGC TTCACCGTGG CCCTGGTGAT  2100
          GATGAACTCC TTCTGTTTCC TGGTCGTGGC CGGTGCCTAC ATCAAACTGT ACTGTGACCT  2160
          GCCGCGGGGC GACTTTGAGG CCGTGTGGGA CTGCGCCATG GTGAGGCACG TGGCCTGGCT  2220
          CATCTTCGCA GACGGGCTCC TCTACTGTCC CGTGGCCTTC CTCAGCTTTG CCTCCATGCT  2280
          GGGCCTCTTC CCTGTCACGC CCGAGGCCGT CAAGTCTGTC CTGCTGGTGG TGCTGCCCCT  2340
          GCCTGCCTGC CTCAACCCAC TGCTGTACCT GCTCTTCAAC CCCCACTTCC GGGATGACCT  2400
          TCGGCGGCTT CGGCCCCGCG CAGGGGACTC AGGGCCCCTA GCCTATGCTG CGGCCGGGGA  2460
          GCTGGAGAAG AGCTCCTGTG ATTCTACCCA GGCCCTGGTA GCCTTCTCTG ATGTGGATCT  2520
          CATTCTGGAA GCTTCTGAAG CTGGGCGGCC CCCTGGGCTG GAGACCTATG GCTTCCCCTC  2580
          AGTGACCCTC ATCTCCTGTC AGCAGCCAGG GGCCCCCAGG CTGGAGGGCA GCCATTGTGT  2640
          AGAGCCAGAG GGGAACCACT TTGGGAACCC CCAACCCTCC ATGGATGGAG AACTGCTGCT  2700
          GAGGGCAGAG GGATCTACGC CAGCAGGTGG AGGCTTGTCA GGGGGTGGCG GCTTTCAGCC  2760
          CTCTGGCTTG GCCTTTGCTT CACACGTGTA AATATCCCTC CCCATTCTTC TCTTCCCCTC  2820
          TCTTCCCTTT CCTCTCTCCC CCTCGGTGAA TGATGGCTGC TTCTAAAACA AATACAACCA  2880
          AAACTCAGCA GTGTGATCTA TAGCAGGATG GCCCAGTCCC TGGCTCCACT GATCACCTCT  2940
          CTCCTGTGAC CATCACCAAC GGGTGCCTCT TGGCCTGGCT TTCCCTTGGC CTTCCTCAGC  3000
          TTCACCTTGA TACTGGGCCT CTTCCTTGTC ATGTCTGAAG CTGTGGACCA GAGACCTGGA  3060
          CTTTTGTCTG CTTAAGGGAA ATGAGGGAAG TAAAGACAGT GAAGGGGTGA AGGGTTGATC  3120
          AGGGCACAGT GGACAGGGAG ACCTCACAGA GAAAGGCCTG GAAGGTGATT TCCCGTGTGA  3180
          CTCATGGATA GGATACAAAA TGTGTTCCAT GTACCATTAA TCTTGACATA TGCCATGCAT  3240
          AAAGACTTCC TATTAAAATA AGCTTTGGAA GAG                                3273
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Seq ID NO: C174 DNA Sequence
Nucleic Acid Accession #: NM_130849

Coding sequence: 101..2044

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     TGGCCACAGC AACACCCACT GAGCACGCTG GGAGCTGAGT ATGGCGTCCC TGGTCTCGCT   120
     GGAGCTGGGG CTGCTTCTGG CTGTGCTGGT GGTGACGGCG ACGGCGTCCC CGCCTGCTGG   180
     TCTGCTGAGC CTGCTCACCT CTGGCCAGGG CGCTCTGGAT CAAGAGGCTC TGGGCGGCCT   240
     GTTAAATACG CTGGCGGACC GTGTGCACTG CACCAACGGG CCGTGTGGAA AGTGCCTGTC   300
10   TGTGGAGGAC GCCCTGGGCC TGGGCGAGCC TGAGGGGTCA GGGCTGCCCC CGGGCCCGGT   360
     CCTGGAGGCC AGGTACGTCG CCCGCCTCAG TGCCGCCGCC GTCCTGTACC TCAGCAACCC   420
     CGAGGGCACC TGTGAGGACA CTCGGGCTGG CCTCTGGGCC TCTCATGCAG ACCACCTCCT   480
     GGCCCTGCTC GAGAGCCCCA AGGCCCTGAC CCCGGGCCTG AGCTGGCTGC TGCAGAGGAT   540
     GCAGGCCCGG GCTGCCGGCC AGACCCCCAA GACGGCCTGC GTAGATATCC CTCAGCTGCT   600
15   GGAGGAGGCG GTGGGGGCGG GGGCTCCGGG CAGTGCTGGC GGCGTCCTGG CTGCCCTGCT   660
     GGACCATGTC AGGAGCGGGT CTTGCTTCCA CGCCTTGCCG AGCCCTCAGT ACTTCGTGGA   720
     CTTTGTGTTC CAGCAGCACA GCAGCGAGGT CCCTATGACG CTGCCGAGC TGTCAGCCTT   780
     GATGCAGCGC CTGGGGGTGG GCAGGGAGGC CCACAGTGAC CACAGTCATC GGCACAGGGG   840
     AGCCAGCAGC CGGGACCCTG TGCCCCTCAT CAGCTCCAGC AACAGCTCCA GTGTGTGGGA   900
20   CACGGTATGC CTGAGTGCCA GGGACGTGAT GGCTGCATAT GGACTGTCGG AACAGGCTGG   960
     GGTGACCCCG GAGGCCTGGG CCCAACTGAG CCCTGCCCTG CTCCAACAGC AGCTGAGTGG  1020
     AGCCTGCACC TCCCAGTCCA GGCCCCCCGT CCAGGACCAG CTCAGCCAGT CAGAGAGGTA  1080
     TCTGTACGGC TCCCTGGCCA CGCTGCTCAT CTGCCTCTGC GCGGTCTTTG GCCTCCTGCT  1140
     GCTGACCTGC ACTGGCTGCA GGGGGGGTCGC CCACTACTG CTGCAGACCT TCCTGAGCCT  1200
25   GGCAGTGGGT GCACTCACTG GGGACGCTGT CCTGCATCTG ACGCCCAAGG TGCTGGGGCT  1260
     GCATACACAC AGCGAAGAGG GCCTCAGCCC ACAGCCACC TGGCGCCTCC TGGCTATGCT  1320
     GGCCGGGCTC TACGCCTTCT TCCTGTTTGA GAACCTCTTC AATCTCCTGC TGCCCAGGGA  1380
     CCCGGAGGAC CTGGAGGACG GGCCTGCGG CCACAGCAGC CATACCCACG GGGCCACAG  1440
     CCACGGTGTG TCCCTGCAGC TGGCACCCAG CGAGCTCCGG CAGCCCAAGC CCCCCCACGA  1500
30   GGGCTCCCGC GCAGACCTGG TGGCGGAGGA GAGCCCGGAG CTGCTGAACC CTGAGCCCAG  1560
     GAGACTGAGC CCAGAGTTGA GGCTACTGCC CTATATGATC ACTCTGGGCG ACGCCGTGCA  1620
     CAACTTCGCC GACGGGCTGG CCGTGGGCGC CGCCTTCGCG TCCTCCTGGA AGACCGGGCT  1680
     GGCCACCTCG CTGGCCGTGT TCTGCCACGA GTTGCCACAC GAGCTGGGGG ACTTCGCCGC  1740
     CTTGCTGCAC GCGGGGCTGT CCGTGCGCCA AGCACTGCTG CTGAACCTGG CCTCCGCGCT  1800
35   CACGGCCTTC GCTGGTCTCT ACGTGGCACT CGCGGTTGGA GTCAGCGAGG AGAGCGAGGC  1860
     CTGGATCCTG GCAGTGGGCCA CCGGCCTGTT CCTCTACGTA GCACTCTGCG ACATGCTCCC  1920
     GGGCGATGTTG AAAGTACGGG ACCCGCGGCC CTGGCTCCTC TTCCTGCTGC ACAACGTGGG  1980
     CCTGCTGGGC GGCTGGACCG TCCTGCTGCT GCTGTCCCTG TACGAGGATG ACATCACCTT  2040
     CTGATACCCT GCCCTAGTCC CCCACCTTTG ACTTAAGATC CCACACCTCA CAAACCTACA  2100
40   GCCCAGAAAC CAGAAGCCCC TATAGAGGCC CCAGTCCCAA CTCCAGTAAA GACACTCTTG  2160
     TCCTTGGAAA AAAAAAAAAA AAAAAAAAA AA                                 2192
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Seq ID NO: C175 DNA Sequence
Nucleic Acid Accession #: NM_018971
Coding sequence: 1..1128

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     AAGTGGCCA CGCTCAGCCT GCTGCTGTGC GTGAGCCTAG CGGGCAACGT GCTGTTCGCG   120
     CTGCTGATCG TGCGGGAGCG CAGCCTGCAC CGCGCCCCGT ACTACCTGCT GCTCGACCTG   180
     TGCCTGGCCG ACGGGCTGCG CGCGCTCGCC TGCCTCCCGG CCGTCATGCT GGCGGCGCGG   240
     CGTGCGGCGG CCGCGGCGGG GGGCGCGCCG GGCGCGCTGG GCTGCAAGCT GCTCGCCTTC   300
     CTGGCCGCGC TCTTCTGCTT CCACGCCGCC TTCCTGCTGC TGGGCGTGGG CGTCACCCGC   360
     TACCTGGCCA TCGCGCACCA CCGCTTCTAT GCAGAGCGCC TGGCCGGCTG GCCGTGCGCC   420
     GCCATGCTGG TGTGCGCCGC CTGGGCGCTG GCGCTGGCCG CGGCCTTCCC GCCAGTGCTG   480
     GACGGCGGTG GCGACGACGA GGACGCGCCG TGCGCCCTGG AGCAGCGGCC CGACGGCGCC   540
     CCCGGCGCGC TGGGCTTCCT GCTGCTGCTG GCCGTGGTGG TGGGCGCCAC GCACCTCGTC   600
     TACCTCCGCC TGCTCTTCTT CATCCACGAC CGCCGCAAGA TGCGGCCCGC GCGCCTGGTG   660
     CCCGCCGTCA GCCACGACTG GACCTTCCAC GGCCCGGGCG CCACCGGCCA GGCGGCGCGT   720
     AACTGGACGG CGGGCTTCGG CCGCGGGCCC ACGCCGGCCG CGCTTGTGGG CATCCGGCCC   780
     GCAGGGCGG GCCGCGGCGC GCGCCGCCTC CTCGTGCTGG AAGAATTCAA GACGGAGAAG   840
     AGGCTGTGCA AGATGTTCTA CGCCGTCACG CTGCTCTTCC TGCTCCTCTG GGGCGCCTAC   900
     GTCGTGGCCA GCTACCTGCG GGTCCTGGTG CGGCCCGGCG CCGTCCCCCA GGCCTACCTG   960
     ACGGCCTCCG TGTGGCTGAC CTTCGCGCAG GCCGGCATCA ACCCCGTCGT GTGCTTCCTC  1020
     TTCAACAGGG AGCTGAGGGA CTGCTTCAGG GCCCAGTTCC CCTGCTGCCA GAGCCCCCGG  1080
     ACCACCCAGG CGACCCATCC CTGCGACCTG AAAGGCATTG GTTTATGA                1128
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Seq ID NO: C176 DNA Sequence
Nucleic Acid Accession #: NM_005631
Coding sequence: 290..2653

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     CCGTTCCGGG CCTCCGCAGC CCAACATGGG CCCCGGGTTC CAAAGTTTGC GAAGTTGGGC   120
     GCCGAGGGGC CGGGGCGCGC GGAGCGTCCG GGGGGGCCCG GGCCCGGATT CTCTGGGCGC   180
     ACAGGTCGCC TGAGCCGCCT CCGCGGCCGC CGAGGTCGTG CGTGTGGCCG GGGGGCTCCG   240
     AGGAGCAGGC GGGGGCGCCG GGGCTTTTGC TGAGTTGGCG GGGTTGGCCA TGGCCGCTGC   300
80   CCGCCCAGCG CGGGGGCCGG AGCTCCCGCT CCTGGGGCTG CTGCTGCTGC TGCTGCTGGG   360
     GGACCCGGGC CGGGGGGCGG CCTCGAGCGG GAACGCGACC GGGCCTGGGC CTCGGAGCGC   420
     GGGCGGGAGC GCGAGGAGGA GCGCGGCGGT GACTGGCCCT CCGCCGCGCC TGAGCCACTG   480
     CGGCCGGGCT GCCCCCTGCG AGCCGCTGCG CTACAACGTG TGCCTGGGCT CGGTGCTGCC   540
     CTACGGGGCC ACCTCCACAC TGCTGGCCGG AGACTCGGAC TCCCAGGAGG AAGCGCACGG   600
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     CAAGCTCGTG CTCTGGTCGG GCCTCCGGAA TGCCCCCCGC TGCTGGGCAG TGATCCAGCC    660
     CCTGCTGTGT GCCGTATACA TGCCCAAGTG TGAGAATGAC CGGGTGGAGC TGCCCGACCG    720
     TACCCTCTGC CAGGCCACCC GAGGCCCCTG TGCCATCGTG GAGAGGGAGC GGGGCTGGCC    780
     TGACTTCCTG CGCTGCACTC CTGACCGCTT CCCTGAAGGC TGCACGAATG AGGTGCAGAA    840
  5  CATCAAGTTC AACAGTTCAG GCCAGTGCGA AGTGCCCTTG GTTCGGACAG ACAACCCCAA    900
     GAGCTGGTAC GAGGACGTGG AGGGCTGCGG CATCCAGTGC CAGAACCCGC TCTTCACAGA    960
     GGCTGAGCAC CAGGACATGC ACAGCTACAT CGCGGGCCTTC GGGGCCGTCA CGGGCCTCTG   1020
     CACGCTCTTC ACCCTGGCCA CATTCGTGGC TGACTGGCGG AACTCGAATC GCTACCCTGC   1080
     TGTTATTCTC TTCTACGTCA ATGCGTGCTT CTTTGTGGGC AGCATTGGCT GGCTGGCCCA   1140
 10  GTTCATGGAT GGTGCCCGCC GAGAGATCGT CTGCCGTGCA GATGGCACCA TGAGGCTTGG   1200
     GGAGCCCACC TCCAATGAGA CTCTGTCCTG CGTCATCATC TTTGTCATCG TGTACTACGC   1260
     CCTGATGGCT GGTGTGGTTT GGTTTGTGGT CCTCACCTAT GCCTGGCACA CTTCCTTCAA   1320
     AGCCCTGGGC ACCACCTACC AGCCTCTCTC GGGCAAGACC TCCTACTTCC ACCTGCTCAC   1380
     CTGGTCACTC CCCTTTGTCC TCACTGTGGC AATCCTTGCT GTGGCGCAGG TGGATGGGGA   1440
 15  CTCTGTGAGT GGCATTGTT TTGTGGGCTA CAAGAACTAC CGATACCGTG CGGGCTTCGT   1500
     GCTGGCCCCA ATCGGCCTGG TGCTCATCGT GGGAGGCTAC TTCCTCATCC GAGGAGTCAT   1560
     GACTCTGTTC TCCATCAAGA GCAACCACCC CGGGCTGCTG AGTGAGAAGG CTGCCAGCAA   1620
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     Nucleic Acid Accession #: AK094595
     Coding sequence: 1..2853

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Seq ID NO: C178 DNA Sequence
Nucleic Acid Accession #: NM_004625
Coding sequence: 310..1359

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Seq ID NO: C179 DNA Sequence OBR3
Nucleic Acid Accession #: NM_003786
Coding sequence: 71..4654

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Seq ID NO: C180 DNA Sequence

Nucleic Acid Accession #: NM_004626
Coding sequence: 124..1188

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      CCCTACACAG ACCGCGTGGT CGAGCGGTGC CACTGTAAGT ACCACTGGTG CTGCTACGTC 1140
25
      ACCTGCCGCA GGTGTGAGCG TACCGTGGAG CGCTATGTCT GCAAGTGAGG CCCTGCCCTC 1200
      CGCCCCACGC AGGAGCGAGG ACTCTGCTCA AGGACCCTCA GCAACTGGGG CCAGGGGCCT 1260
      GGAGACACTC CATGGAGCTC TGCTTGTGAA TTCCAGATGC CAGGCATGGG AGGCGGCTTG 1320
      TGCTTTGCCT TCACTTGGAA GCCACCAGGA ACAGAAGGTC TGGCCACCCT GGAAGGAGGG 1380
      CAGGACATCA AAGGAAACCG ACAAGATTAA AAATAACTTG GCAGCCTGAG GCTCTGGAGT 1440
30
      GCCCACAGGC TGGTGTAAGG AGCGGGGCTT GGGATCGGTG AGACTGATAC AGACTTGACC 1500
      TTTCAGGGCC ACAGAGACCA GCCTCCGGGA AGGGGTCTGC CCGCCTTCTT CAGAATGTTC 1560
      TGCGGGACCC CCTGGCCCAC CCTGGGGTCT GAGCCTGCTG GGCCCACCAC ATGGAATCAC 1620
      TAGCTTGGGT TGTAAATGTT TTCTTTTGTT TTTTGCTTTT TCTTCCTTTG GGATGTGGAA 1680
      GCTACAGAAA TATTTATAAA ACATAGCTTT TTCTTTGGGG TGGCACTTCT CAATTCCTCT 1740
35
      TTATATATTT TATATATATA AATATATATG TATATATATA ATGATCTCTA TTTTAAAACT 1800
      AGCTTTTTAA GCAGCTGTAT GAAATAAATG CTGAGTGAGC CCCAGCCCGC·CCCTGCAGTT 1860
      CCCGGCCTCG TCAAGTGAAC TCGGCAGACC CTGGGGCTGG CAGAGGGAGC TCTCCAGTTT 1920
      CCAGGCA                                                            1927
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Seq ID NO: C181 DNA Sequence
Nucleic Acid Accession #: NM_031866
Coding sequence: 6..2090

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      1          11         21         31         41         51
      |          |          |          |          |          |
45
      ACAGCATGGA GTGGGGTTAC CTGTTGGAAG TGACCTCGCT GCTGGCCGCC TTGGCGCTGC   60
      TGCAGCGCTC TAGCGGCCGCT GCGGCCGCCCT CGGCCAAGGA GCTGGCATGC CAAGAGATCA  120
      CCGTGCCGCT GTGTAAGGGC ATCGGCTACA ACTACACCTA CATGCCCAAT CAGTTCAACC  180
      ACGACACGCA AGACGAGGCG GGCCTGGAGG TGCACCAGTT CTGGCCGCTG GTGGAGATCC  240
50
      AGTGCTCGCC CGATCTCAAG TTCTTCCTGT GCAGCATGTA CACGCCCATC TGCCTAGAGG  300
      ACTACAAGAA GCCGCTGCCG CCCTGCCGCT CGGTGTGCGA GCGCGCCAAG GCCGGCTGCG  360
      CGCCGCTCAT GCGCCAGTAC GGCTTCGCCT GGCCCGACCG CATGCGCTGC GACCGGCTGC  420
      CCGAGCAAGG CAACCCTGAC ACGCTGTGCA TGGACTACAA CCGCACCGAC CTAACCACCG  480
      CCGCGCCCAG CCCGCCGCGC CGCCTGCCGC CGCCGCCGCC CGGCGAGCAG CCGCCTTCGG  540
55
      GCAGCGGCCA CGGCCGCCCG CCGGGGGCCA GGCCCCCGCA CCGCGGAGGC GGCAGGGGCG  600
      GTGGCGGCGG GGACGCGGCG GCGCCCCCAG CTCGCGGCGG CGGCGGTGGC GGGAAGGCGC  660
      GGCCCCCTGG CGGCGGCGCG GCTCCCTGCG AGCCGGGGTG CCAGTGCCGC GCGCCTATGG  720
      TGAGCGTGTC CAGCGAGCGC CACCCGCTCT ACAACCGCGT CAAGACAGGC CAGATCGCTA  780
      ACTGCGCGCT GCCCTGCCAC AACCCCTTTT TCAGCCAGGA CGAGCGCGCC TTCACCGTCT  840
60
      TCTGGATCGG CCTGTGGTCG GTGCTCTGCT TCGTGTCCAC CTTCGCCACC GTCTCCACCT  900
      TCCTTATCGA CATGGAGCGC TTCAAGTACC CGGAGCGGCC CATTATCTTC CTCTCGGCCT  960
      GCTACCTCTT CGTGTCGGTG GGCTACCTAG TGCGCCTGGT GGCGGGCCAC GAGAAGGTGG 1020
      CGTGCAGCGG TGGCGCGCCG GGCGCGGGGG GCGCTGGGGG CGCGGCGGCGG CGGCGGCCGG 1080
65
      GCGCGGGCGC GGCGGGGCGCG GGCGCGGGCG GCCCGGGCGG CGCGGCGGAG TACGAGGAGC 1140
      TGGGCGCGGT GGAGCAGCAC GTGCGCTACG AGACCACCGG CCCCGCGCTG TGCACCGTGG 1200
      TCTTCTTGCT GGTCTACTTC TTCGGCATGG CCAGCTCCAT CTGGTGGGTG ATCTTGTCGC 1260
      TCACATGGTT CCTGGCGGCC GGTATGAAGT GGGGCAACGA AGCCATCGCC GGCTACTCGC 1320
      AGTACTTCCA CCTGGCCGCG TGGCTTGTGC CCAGCGTCAA GTCCATCGCG GTGCTGGCGC 1380
70
      TCAGCTCGGT GGACGGCGAC CCGGTGGCGG GCATCGCTA CGTGGGCAAC CAGAGCCTGG 1440
      ACAACCTGCG CGGCTTCGTG CTGGCGCCGC TGGTCATCTA CCTCTTCATC GGCACCATGT 1500
      TCCTGCTGGC CGGCTTCGTG TCCCTGTTCC GCATCCGCTC GGTCATCAAG CAACAGGACG 1560
      GCCCCACCAA GACGCACAAG CTGGAGAAGC TGATGATCCG CCTGGGCCTG TTCACCGTGC 1620
      TCTACACCGT GCCCGCCGCG GTGGTGGTCG CCTGCCTCTT CTACGAGCAG·CACAACCGCC 1680
75
      CGCGCTGGGA GGCCACGCAC AACTGCCCGT GCCTGCGGGA CCTGCAGCCC GACCAGGCAC 1740
      GCAGGCCCGA CTACGCCGTC TTCATGCTCA AGTACTTCAT GTGCCTAGTG GTGGGCATCA 1800
      CCTCGGGCGT GTGGGTCTGG TCCGGCAAGA CGCTGGAGTC CTGGCGCTCC CTGTGCACCC 1860
      GCTGCTGCTG GGCCAGCAAG GGGCGCCGCGG TGGCGGGGGG CGCGGGCGCC ACGGCCGCGG 1920
      GGGGTGGCGG CGGGCCGGGG GGCGGCGGCG GCGGGGGACC CGGCGGCGGC GGGGGGCCGG 1980
80
      GCGCGGCGGG GGGCTCCCTC TACAGCGACG TCAGCACTGG CCTGACGTGG CGGTCGGGCA 2040
      CGGCGAGCTC CGTGTCTTAT CCAAAGCAGA TGCCATTGTC CCAGGTCTGA GCGGAGGGGA 2100
      GGGGGCGCCC AGGAGGGGTG GGGAGGGGGG CGAGGAGACC CAAGTGCAGC GAAGGGACAC 2160
      TTGATGGGCT GAGGTTCCCA CCCCTTCACA GTGTTGATTG CTATTAGCAT GATAATGAAC 2220
      TCTTAATGGT ATCCATTAGC TGGGACTTAA ATGACTCACT TAGAACAAAG TACCTGGCAT 2280
      TGAAGCCTCC CAGACCCAGC CCCTTTTCCT CCATTGATGT GCGGGGAGCT CCTCCCGCCA 2340
```

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CGCGTTAATT TCTGTTGGCT GAGGAGGGTG GACTCTGCGG CGTTTCCAGA ACCCGAGATT   2400
TGGAGCCCTC CCTGGCTGCA CTTGGCTGGG TTTGCAGTCA GATACACAGA TTTCACCTGG   2460
GAGAACCTCT TTTTCTCCCT CGACTCTTCC TACGTAAACT CCCACCCCTG ACTTACCCTG   2520
GAGGAGGGGT GACCGCCACC TGATGGGATT GCACGGTTTG GGTATTCTTA ATGACCAGGC   2580
AAATGCCTTA AGTAAACAAA CAAGAAATGT CTTAATTATA CACCCCACGT AAATACGGGT   2640
TTCTTACATT AGAGGATGTA TTTATATAAT TATTTGTTAA ATTGTAAAAA AAAAAAGTGT   2700
AAAATATGTA TATATCCAAA GATATAGTGT GTACATTTTT TTGTAAAAAG TTTAGAGGCT   2760
TACCCCTGTA AGAACAGATA TAAGTATTCT ATTTTGTCAA TAAAATGACT TTTGATAAAT   2820
GATTTAACCA TTGCCCTCTC CCCCGCCTCT TCTGAGCTGT CACCTTTAAA GTGCTTGCTA   2880
AGGACGCATG GGGAAAATGG ACATTTTCTG GCTTGTCATT CTGTACACTG ACCTTAGGCA   2940
TGGAGAAAAT TACTTGTTAA ACTCTAGTTC TTAAGTTGTT AGCCAAGTAA ATATCATTGT   3000
TGAACTGAAA TCAAAATTGA GTTTTTGCAC CTTCCCCAAA GACGGTGTTT TTCATGGGAG   3060
CTCTTTTCTG ATCCATGGAT AACAACTCTC ACTTTAGTGG ATGTAAATGG AACTTCTGCA   3120
AGGCAGTAAT TCCCCTTAGG CCTTGTTATT TATCCTGCAT GGTATCACTA AAGGTTTCAA   3180
AACCCTGAAA AAAA                                                      3195
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Seq ID NO: C182 DNA Sequence
Nucleic Acid Accession #: XM_050625
Coding sequence: 222..1109

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1          11         21         31         41         51
|          |          |          |          |          |
CCGGGTCGGA GCCCCCCGGA GCTGCGCGCG GGCTTGCAGC GCCTCGCCCG CGCTGTCCTC   60
CCGGTGTCCC GCTTCTCCGC GCCCCAGCCG CCGGCTGCCA GCTTTTCGGG GCCCCGAGTC   120
GCACCCAGCG AAGAGAGCGG GCCCGGGACA AGCTCGAACT CCGGCCGCCT CGCCCTTCCC   180
CGGCTCCGCT CCCTCTGCCC CCTCGGGGTC GCGCGCCCAC GATGCTGCAG GGCCCTGGCT   240
CGCTGCTGCT GCTCTTCCTC GCCTCGCACT GCTGCCTGGG CTCGGCGCGC GGGCTCTTCC   300
TCTTTGGCCA GCCCGACTTC TCCTACAAGC GCAGCAATTG CAAGCCCATC CCTGCCAACC   360
TGCAGCTGTG CCACGGCATC GAATACCAGA ACATGCGGCT GCCCAACCTG CTGGGCCACG   420
AGACCATGAA GGAGGTGCTG GAGCAGGCCG GCGCTTGGAT CCCGCTGGTC ATGAAGCAGT   480
GCCACCCGGA CACCAAGAAG TTCCTGTGCT CGCTCTTCGC CCCCGTCTGC CTCGATGACC   540
TAGACGAGAC CATCCAGCCA TGCCACTCGC TCTGCGTGCA GGTGAAGGAC CGCTGCGCCC   600
CGGTCATGTC CGCCTTCGGC TTCCCCTGGC CGACATGCT TGAGTGCGAC CGTTTCCCCC   660
AGGACAACGA CCTTTGCATC CCCCTCGCTA GCAGCGACCA CCTCCTGCCA GCCACCGAGG   720
AAGCTCCAAA GGTATGTGAA GCCTGCAAAA ATAAAAATGA TGATGACAAC GACATAATGG   780
AAACGCTTTG TAAAAATGAT TTTGCACTGA AAATAAAAGT GAAGGAGATA ACCTACATCA   840
ACCGAGATAC CAAAATCATC CTGGAGACCA AGAGCAAGAC CATTTACAAG CTGAACGGTG   900
TGTCCGAAAG GGACCTGAAG AAATCGGTGC TGTGGCTCAA AGACAGCTTG CAGTGCACCT   960
GTGAGGAGAT GAACGACATC AACGCGCCCT ATCTGGTCAT GGGACAGAAA CAGGGTGGGG   1020
AGCTGGTGAT CACCTCGGTG AAGCGGTGGC AGAAGGGGCA GAGAGAGTTC AAGCGCATCT   1080
CCCGCAGCAT CCGCAAGCTG CAGTGCTAGT CCCGGCATCC TGATGGCTCC GACAGGCCTG   1140
CTCCAGAGCA CGGCTGACCA TTTCTGCTCC GGGATCTCAG CTCCCGTTCC CCAAGCACAC   1200
TCCTAGCTGC TCCAGTCTCA GCCTGGGCAG CTTCCCCCTG CCTTTTGCAC GTTTGCATCC   1260
CCAGCATTTC CTGAGTTATA AGGCCACAGG AGTGGATAGC TGTTTTCACC TAAAGGAAAA   1320
GCCCACCCGA ATCTTGTAGA AATATTCAAA CTAATAAAAT CATGAATATT TTTATGAAGT   1380
TT                                                                  1382
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Seq ID NO: C183 DNA Sequence
Nucleic Acid Accession #: NM_001306.1
Coding sequence: 199..861

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1          11         21         31         41         51
|          |          |          |          |          |
AATTCGGCAC GAGGGCAGGT GCAGGCGCAC GCGGCGAGAG CGTATGGAGC CGAGCCGTTA   60
GCGCGCGCCG TCGGTGAGTC AGTCCGTCCG TCCGTCCGTC CGTCGGGGCG CCGCAGCTCC   120
CGCCAGGCCC AGCGGCCCCG GCCCCTCGTC TCCCCGCACC CGGAGCCACC CGGTGGAGCG   180
GGCCTTGCCG CGGCAGCCAT GTCCATGGGC CTGGAGATCA CGGGCACCGC GCTGGCCGTG   240
CTGGGCTGGC TGGGCACCAT CGTGTGCTGC GCGGTTGCCCA TGTGGCGCGT GTCGGCCTTC   300
ATCGGCAGCA ACATCATCAC GTCGCAGAAC ATCTCGGGAGG GCCTGTGGAT GAACTGCGTB   360
GTGCAGAGCA CCGGCCAGAT GCAGTGCAAG GTGTACGACT CGCTGCTGGC ACTGCCACAG   420
GACCTTCAGG CGGCCGCGC CCTCATCGTG GTGGCCATCC TGCTGGCCGC CTTCGGGCTG   480
CTAGTGGCGC TGGTGGGCGC CCAGTGCACC AACTGCGTGC AGGACGACAC GGCCAAGGCC   540
AAGATCACCA TCGTGGCAGG CGTGCTGTTC CTTCTCGCCG CCCTGCTCAC CCTCGTGCCG   600
GTGTCCTGGT CGGCCAACAC CATTATCCGG GACTTCTACA ACCCCGTGGT GCCCGAGGCG   660
CAGAAGCGCG AGATGGGCGC GGGCCTGTAC GTGGGCTGGG CGGCCGCGGC GCTGCAGCTG   720
CTGGGGGGCG CGCTGCTCTG CTGCTCGTGT CCCCCACGCG AGAAGAAGTA CACGGCCACC   780
AAGGTCGTCT ACTCCGCGCC GCGCTCCACC GGCCCGGGAG CCAGCCTGGG CACAGGCTAC   840
GACCGCAAGG ACTACGTCTA AGGGACAGAC GCAGGGAGAC CCCACCACCA CCACCACCAC   900
CAACACCACC ACCACCACCG CGAGCTGGAG CGCGCACCAG GCCATCCAGC GTGCAGCCTT   960
GCCTCGGAGG CCAGCCCACC CCAGAGCCC AGGAAGCCCC CGCGCTGGAC TGGGGCAGCT   1020
TCCCCAGCAG CCACGGCTTT GCGGGCCGGG CAGTCGACTT CGGGGCCCAG GGACCAACCT   1080
GCATGGACTG TGAAACCTCA CCCTTCTGGA GCACGGGGCC TGGGTGACCG CCAATACTTG   1140
ACCACCCCGT CGAGCCCCAT CGGGCCGCTG CCCCCATGTC GCGCTGGGCA GGGACCGGCA   1200
GCCCTGGAAG GGGCACTTGA TATTTTTCAA TAAAAGCCTC TCGTTTTAGC               1250
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Seq ID NO: C184 DNA Sequence
Nucleic Acid Accession #: NM_012449.1
Coding sequence: 66..1085

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1          11         21         31         41         51
|          |          |          |          |          |
CCGAGACTCA CGGTCAAGCT AAGGCGAAGA GTGGGTGGCT GAAGCCATAC TATTTTATAG   60
AATTAATGGA AAGCAGAAAA GACATCACAA ACCAAGAAGA ACTTTGGAAA ATGAAGCCTA   120
GGAGAAATTT AGAAGAAGAC GATTATTTGC ATAAGGACAC GGGAGAGACC AGCATGCTAA   180
```

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        AAAGACCTGT GCTTTTGCAT TTGCACCAAA CAGCCCATGC TGATGAATTT GACTGCCCTT   240
        CAGAACTTCA GCACACACAG GAACTCTTTC CACAGTGGCA CTTGCCAATT AAAATAGCTG   300
        CTATTATAGC ATCTCTGACT TTTCTTTACA CTCTTCTGAG GGAAGTAATT CACCCTTTAG   360
        CAACTTCCCA TCAACAATAT TTTTATAAAA TTCCAATCCT GGTCATCAAC AAAGTCTTGC   420
  5     CAATGGTTTC CATCACTCTC TTGGCATTGG TTTACCTGCC AGGTGTGATA GCAGCAATTG   480
        TCCAACTTCA TAATGGAACC AAGTATAAGA AGTTTCCACA TTGGTTGGAT AAGTGGATGT   540
        TAACAAGAAA GCAGTTTGGG CTTCTCAGTT TCTTTTTTGC TGTACTGCAT GCAATTTATA   600
        GTCTGTCTTA CCCAATGAGG CGATCCTACA GATACAAGTT GCTAAACTGG GCATATCAAC   660
        AGGTCCAACA AAATAAAGAA GATGCCTGGA TTGAGCATGA TGTTTGGAGA ATGGAGATTT   720
  10    ATGTGTCTCT GGGAATTGTG GGATTGGCAA TACTGGCTCT GTTGGCTGTG ACATCTATTC   780
        CATCTGTGAG TGACTCTTTG ACATGGAGAG AATTTCACTA TATTCAGAGC AAGCTAGGAA   840
        TTGTTTCCCT TCTACTGGGC ACAATACACG CATTGATTTT TGCCTGGAAT AAGTGGATAG   900
        ATATAAAACA ATTTGTATGG TATACACCTC CAACTTTTAT GATAGCTGTT TTCCTTCCAA   960
  15    TTGTTGTCCT GATATTTAAA AGCATACTAT TCCTGCCATG CTTGAGGAAG AAGATACTGA  1020
        AGATTAGACA TGGTTGGGAA GACGTCACCA AAATTAACAA AACTGAGATA TGTTCCCAGT  1080
        TGTAGAATTA CTGTTTACAC ACATTTTTGT TCAATATTGA TATATTTTAT CACCAACATT  1140
        TCAAGTTTGT ATTTGTTAAT AAAATGATTA TTCAAGGAAA AAAAAAAAAA AAAAA        1195
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Seq ID NO: C185 DNA Sequence
Nucleic Acid Accession #: NM_001775.1
Coding sequence: 70..972

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        1          11         21         31         41         51
        |          |          |          |          |          |
        CTAAAGCTCT CTTGCTGCCT AGCCTCCTGC CGGCCTCATC TTCGCCCAGC CAACCCCGCC   60
        TGGAGCCCTA TGGCCAACTG CGAGTTCAGC CCGGTGTCCG GGGACAAACC CTGCTGCCGG  120
        CTCTCTAGGA GAGCCCAACT CTGTCTTGGC GTCAGTATCC TGGTCCTGAT CCTCGTCGTG  180
        GTGCTCGCGG TGGTCGTCCC GAGGTGGCGC CAGACGTGGA GCGGTCGGG CACCACCAAG  240
        CGCTTTCCCG AGACCGTCCT GGCGCGATGC GTCAAGTACA CTGAAATTCA TCCTGAGATG  300
        AGACATGTAG ACTGCCAAAG TGTATGGGAT GCTTTCAAGG GTGCATTTAT TTCAAAACAT  360
        CCTTGCAACA TTACTGAAGA AGACTATCAG CCACTAATGA AGTTGGGAAC TACAGACCGTA  420
        CCTTGCAACA AGATTCTTCT TTGGAGCAGA ATAAAGATC TGGCCCATCA GTTCACACAG  480
        GTCCAGCGGG ACATGTTCAC CCTGGAGGAC ACGCTGCTAG GCTACCTTGC TGATGACCTC  540
        ACATGGTGTG GTGAATTCAA CACTTCCAAA ATAAACTATC AATCTTGCCC AGACTGGAGA  600
        AAGGACTGCA GCAACAACCC TGTTTCAGTA TTCTGGAAAA CGGTTTCCCG CAGGTTTGCA  660
        GAAGCTGCCT GTGATGTGGT CCATGTGATG CTCAATGGAT CCCGCAGTAA AATCTTTGAC  720
        AAAAACAGCA CTTTTGGGAG TGTGGAAGTC CATAATTTGC AACCAGAGAA GGTTCAGACA  780
        CTAGAGGCCT GGGTGATACA TGGTGGAAGA GAAGATTCCA GAGACTTATG CCAGGATCCC  840
        ACCATAAAAG AGCTGGAATC GATTATAAGC AAAAGGAATA TTCAATTTTC CTGCAAGAAT  900
        ATCTACGAC CTGACAAGTT TCTTCAGTGT GTGAAAAATC CTGAGGATTC ATCTTGCACA  960
        TCTGAGATCT GAGCCAGTCG CTGTGGTTGT TTTAGCTCCT TGACTCCTTG TGGTTTATGT 1020
        CATCATACAT GACTCAGCAT ACCTGCTGGT GCAGAGCTGA AGATTTTGGA GGGTCCTCCA 1080
        CAATAAGGTC AATGCCCAGA ACGGAAGCCT TTTTCCCCAA AGTCTTAAAA TAACTTATAT 1140
        CATCAGCATA CCTTTATTGT GATCTATCAA TAGTCAAGAA AAATTATTGT ATAAGATTAG 1200
        AATGAAAATT GTATGTTAAG TTACTTCCTT TAG                               1233
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Seq ID NO: C186 DNA Sequence
Nucleic Acid Accession #: XM_120513.2
Coding sequence: 1..2208

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        1          11         21         31         41         51
        |          |          |          |          |          |
        ATGGTGTCAT GCACGTTCTC GGGGCCCCTA CGGGAAACAA ATGAAAACGT GAAAAAGTTC   60
        TACGCCTTGC GAGCTTTTAT GTTCCGCATG AGCTCAGAGG CCGCGATGCT CGGGGAAAGC  120
        AGGACCCCAA AGCCCCGTAA ACACCGCGCG ACCACCCGGG CCAAGATCTT CAAGAGGTTC  180
        TTTTCAGAAG GATCGGAGAG CAATTCCCGA TTGGTAGAAG AACTTGCTGT AATACACACG  240
        TACTCTGACG ACCCCGCCCC AACGACTAGC CCCTCCTCTG TGCAACCCCG AGAGTTTGGG  300
        GTCATGCAGG GGGCGCCACG AGCTCGTTTC GGAAGCCGGA CCCCGCCCGC AGCCGCAGAA  360
        GCCTCGAGTC CACATCTGGG CATTGGCGAG GCAGCCTGTC AATCAGGAGC TCGGGCGGCA  420
        GCCCCCCGCG CGGGGGCTCG GCGATGCCAG CCTCAGCGAC AGGCGGCGGC GGCGGCCGCA  480
        ACGGCACAGA CACACACCCT CCCACACGCG CGCACCAGGG CAGACCCGGC GGGCAGGCGG  540
        CGGAGGCACC CTCGGAGCCC GGCGCCCGGC GGGGAGGGGA CGTGCTCCGA GGGACCGGCC  600
        CCGAGGCGCC GGATGGAGGA AGAGATGCAG CCGGCAGAGG AGGGGCCCAG CGTCCCCAAA  660
        ATCTACAAGC AGCGCAGCCC CTACAGCGTC CTCAAGACGT TCCCCAGCAA GAGACCGGCG  720
        CTGGCCAAGC GCTACGAGCG ACCCACCCTG GTGGAGCTGC CGCACGGCCA CTTGAGGACT  780
        CCGGCGCAGC CGCCGCCCGC GTCCCCCGCC GCCTCCTCGT CGTCTTCGTT CGCCGCTGTC  840
        GTCAGACTCG GGGCTCCTCC GCGTCCGCCA CGCCGTGGAT TTCGGGCGCG GGGAACCATC  900
        CCGCCCCTCC TTCCTGCCCC GGGAGTCGCA GGCACTCTGC TCCCACCGCC CACGTCGTCG  960
        TCCCCGGCCAT CCCCTCGTCC CCGTCCGTGG CACGCTGCCG CGCCGCGGGG AGGGACCTCA 1020
        CATACACATA TGTGGAGGTC CCAGTCCACA CTTCCAGGAT CTGACACCAT GGTCTCTGTC 1080
        TTTGGATTGA TGGCTCAGAG AAGATGGCAG CATAGATCTT TAAAGCAGTT TGAGTGGGGA 1140
        ATTCTTGGAT CTTGGGGTAC TTGGCCATGT GGACAGGATT GGCTGAGAA GGAGGGTCAG 1200
        GTGGCGGTCC TGCTGCCAAG GTCTGAGGGT AATACTGCTC CTAAGAAGAG TCGAATGATC 1260
        TTGGATGCCT TTGCCCAGCA GTGCAGTCGA GTTCTTAGCC TCTTAAATTG TGGAGGAAAA 1320
        CTCCTGGACT CCAACCATTC TCAGTCCATG ATTTCTTGCG TAAAGCAGGA AGGCTCAAGT 1380
        TACAACGAAA GACAGGAGCA CTGTCACATT GGGAAAGGGG TCCACAGTCA GACCTCAGAC 1440
        AATGTAGACA TAGAGATGCA GTATATGCAA AGGAAACAAC AAACTTCTGC CTTTTTGAGG 1500
        GTTTTCACTG ACTCTCTACA AAATTACCTG CTCTCGGGAA GCTTTCCAAC TCCAAACCCC 1560
        TCGTCAGCCA GTGAATATGG CCATCTGGCC GACGTGGATC CTCTGTCAAC CTCTCCTGTG 1620
        CATACATTAG AAAATATTTC ACTTGATTCC ACAGCTTCCC TGTGTAAATC TAGGCATCTA 1680
        TCCAGAGAGC CCCCAGTCAA GAGTGATTTT CCAAATCCTT TGCAGCAGGC CTTGGCTGGG 1740
        GGTGCTTCAA GACCATTTTC AGGGGCACAG CAAAGCATCG CTTACAGGGT GAACTCTGAA 1800
        CTTGAGGATG GCATCCGCAG CCCCGTCCCT TTGAGTTGTG AGGCCTTGGA AATGGATTTG 1860
        ACCTCCTTGG GAAGCAAGCA GCTGTTGAAC AACTATCCTG TCTACTATAAC GAGCAAACAG 1920
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     TGGGATGAGG CTGTAAATTC TTCAAAGAAA GATGGGAGAC GGCTCCTTCG ATACCTCATC   1980
     AGATTTGTTT TCACAACCGA TGAGCTTAAG TACTCATGCG GCCTTGGGAA AAGGAAAAGG   2040
5    TCAGTGCAGT CAGGAGAGAC AGGTCCCGAA AGACGCCCTC TGGATCCAGT TAAAGTAACA   2100
     TGCCTCCGAG GTACTGCATC CTTCCGCTCA GTGTCACCAT CTGTGATCTC ATTTCACCGC   2160
     ATTGGCTGTG GCTCTCCCCG TACAAGTGTT CAGCCTTCTG TATTTTGA              2208
```

Seq ID NO: C187 DNA Sequence
Nucleic Acid Accession #: AB037745.1
Coding sequence: 26..1744

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     1         11        21        31        41        51
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     ATGGTGGAAC ACGCTGCCCA CAAACATGGA AACGACCGTT CTCAGTGGGA TCAACTTCGA   60
     GTACAAGGGC ATGACAGGCT GGGAGGTGGC TGGTGATCAC ATTTACACAG CTGCTGGAGC   120
15   CTCAGACAAT GACTTCATGA TTCTCACTCT GGTTGTGCCA GGATTTAGAC CTCCGCAGTC   180
     GGTGATGGCA GACACAGAGA ATAAAGAGGT GGCCAGAATC ACATTTGTCT TTGAGACCCT   240
     CTGTTCTGTG AACTGTGAGC TCTACTTCAT GGTGGGTGTG AATTCTAGGA CCAACACTCC   300
     TGTGGAGACG TGGAAAGGTT CCAAAGGCAA ACAGTCCTAT ACCTACATCA TTGAGGAGAA   360
     CACTACCACG AGCTTCACCT GGGCCTTCCA GAGGACCACT TTTCATGAGG CAAGCAGGAA   420
20   GTACACCAAT GACGTTGCCA AGATCTACTC CATCAATGTC ACCAATGTTA TGAATGGCGT   480
     GGCCTCCTAC TGCCGTCCCT GTGCCCTAGA AGCCTCTGAT GTGGGCTCCT CCTGCACCTC   540
     TTGTCCTGCT GGTTACTATA TTGACCGAGA TTCAGGAACC TGCCACTCCT GCCCCCCTAA   600
     CACAATTCTG AAAGCCCACC AGCCTTATGG TGTCCAGGCC TGTGTGCCCT GTGGTCCAGG   660
     GACCAAGAAC AACAAGATCC ACTCTCTGTG CTACAATGAT TGCACCTTCT CACGCAACAC   720
25   TCCAACCAGG ACTTTCAACT ACAACTTCTC CGCTTTGGCA AACACCGTCA CTCTTGCTGG   780
     AGGGCCAAGC TTCACTTCCA AAGGGTTGAA ATACTTCCAT CACTTTACCC TCAGTCTCTG   840
     TGGAAACCAG GGTAGGAAAA TGTCTGTGTG CACCGACAAT GTCACTGACC TCCGGATTCC   900
     TGAGGGTGAG TCAGGGTTCT CCAAATCTAT CACAGCCTAC GTCTGCCAGG CAGTCATCAT   960
     CCCCCCAGAG GTGACAGGCT ACAAGGCCGG GGTTTCCTCA CAGCCTGTCA GCCTTGCTGA   1020
30   TCGACTTATT GGGGTGACAA CAGATATGAC TCTGGATGGA ATCACCTCCC CAGCTGAACT   1080
     TTTCCACCTG GAGTCCTTGG GAATACCGGA CGTGATCTTC TTTTATAGGT CCAATGATGT   1140
     GACCCAGTCC TGCAGTTCTG GGAGATCAAC CACCATCCGC GTCAGGTGCA GTCCACAGAA   1200
     AACTGTCCCT GGAAGTTTGC TGCTGCCAGG AACGTGCTCA GATGGGACCT GTGATGGCTG   1260
     CAACTTCCAC TTCCTGTGGG AGAGCGCGGC TGCTTGCCCG CTCTGCTCAG TGGCTGACTA   1320
35   CCATGCTATC GTCAGCAGCT GTGTGGCTGG GATCCAGAAG ACTACTTACG TGTGGCGAGA   1380
     ACCCAAGCTA TGCTCTGGTG GCATTTCTCT GCCTGAGCAG AGAGTCACCA TCTGCAAAAC   1440
     CATAGATTTC TGGCTGAAAG TGGGCATCTC TGCAGGCACC TGTACTGCCA TCCTGCTCAC   1500
     CGTCTTGACC TGCTACTTTT GGAAAAAGAA TCAAAAACTA GAGTACAAGT ACTCCAAGCT   1560
     GGTGATGAAT GCTACTCTCA AGGACTGTGA CCTGCCAGCA GCTGACAGCT GCGCCATCAT   1620
40   GGAAGGCGAG GATGTAGAGG ACGACCTCAT CTTTACCAGC AAGAAGTCAC TCTTTGGGAA   1680
     GATCAAATCA TTTACCTCCA AGCAGCCAGC TCCTGTCACC ATCTCTCTTT CAGAGGACTC   1740
     CTGATGGATT TGACTCAGTG CCGCTGAAGA CATCCTCAGG AGGCCCAGAC ATGGACCTGT   1800
     GAGAGGCACT GCCTGCCTCA CCTGCCTCCT CACCTTGCAT AGCACCTTTG CAAGCCTGCG   1860
     GCGATTTGGG TGCCAGCATC CTGCAACACC CACTGCTGGA AATCTCTTCA TTGTGGCCTT   1920
45   ATCAGATGTT TGAATTTCAG ATCTTTTTTT ATAGAGTACC CAAACCCTCC TTTCTGCTTG   1980
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1316

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1317

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1319

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50           CATTCCAGGA AAACTGGGAC ATAGGATCGT CCCGCTATGA TGGAAGTGTT CAGACAGTTT   1140
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Seq ID NO: C195 DNA Sequence
Nucleic Acid Accession #: NM_005971.2
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             CCTAGAAGAT AAAAACAGTC CTTTCTACTA TGACTGGCAC AGCCTCCAGG TTGGCGGGCT   300
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Seq ID NO: C196 DNA Sequence
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Coding sequence: 55..1575

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           CAGCCTCTGG AAAATCAGCT CCTCTCTGAG GAAACAAAGT CAACTGAGAC TGAGACTGGG   240
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Seq ID NO: C197 DNA Sequence
Nucleic Acid Accession #: NM_021984.1
Coding sequence: 572..1753

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Seq ID NO: C198 DNA Sequence
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Coding sequence: 572..1657
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1324

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Seq ID NO: C199 DNA Sequence
Nucleic Acid Accession #: NM_021990.1
Coding sequence: 1309..2490

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     CTGACCATGA CCACGTTGGG CACCTTTTCT CGTAAGAATT TCCCGCGTGT CTCCTATATC  1980
     ACAGCCTTGG ATTTCTATAT CGCCATCTGC TTCGTCTTCT GCTTCTGCGC TCTGTTGGAG  2040
     TTTGCTGTGC TCAACTTCCT GATCTACAAC CAGACAAAG CCCATGCTTC TCCTAAACTC  2100
     CGCCATCCTC GTATCAATAG CCGTGCCCAT GCCCGTACCC GTGCACGTTC CCGAGCCTGT  2160
     GCCCGCCAAC ATCAGGAAGC TTTTGTGTGC CAGATTGTCA CCACTGAGGG AAGTGATGGA  2220
     GAGGAGCGCC CGTCTTGCTC AGCCCAGCAG CCCCCTAGCC CAGGTAGCCC TGAGGGTCCC  2280
     CGCAGCCTCT GCTCCAAGCT GGCCTGCTGT GAGTGGTGCA AGCGTTTTAA GAAGTACTTC  2340
     TGCATGGTCC CCGATTGTGA GGGCAGTACC TGGCAGCAGG GCCGCCTCTG CATCCATGTC  2400
     TACCGCCTGG ATAACTACTC GAGAGTTGTT TTCCCAGTGA CTTTCTTCTT CTTCAATGTG  2460
     CTCTACTGGC TTGTTTGCCT TAACTTGTAG GTACCAGCTG GTACCCTGTG GGGCAACCTC  2520
     TCCAGTTCCC CAGGAGGTCC AAGCCCCTTG CCAAGGGAGT TGGGGGAAAG CAGCAGCAGC  2580
     AGCAGGAGCG ACTAGAGTTT TTCCTGCCCC ATTCCCCAAA CAGAAGCTTG CAGAGGGTTT  2640
     GTCTTTGCTG CCCCTCTCCC CTACCTGGCC CATTCACTGA GTTTTCTCAG CAGACCATTT  2700
     CAAATTATTA ATAAATGGGC CACCTCCCTC TTCTTCAAGG AGCATCCGTG ATGCTCAGTG  2760
     TTCAAAACCA CAGCCACTTA GTGATCAGCT CCCTAAAACC ATGCCTAAGT ACAGGCGGAT  2820
     TAGCTATCTT CCAACAATGC TGACCACCAG ACAATTACTG CATTTTTCCA GAAGCCCACT  2880
     ATTGCCTTTG CAGTGCTTTC GGCCCAGTTC TGGCCTCAGC CTCAAAGTGC ACCGACTAGT  2940
     TGCTTGCCTA TACCTGGCAC CTCATTAAGA TGCTGGGCAG CAGTATAACA GGAGGAAGAG  3000
     ATCCCTCTCC TTTGGTCAGA TTATTATGTT CTCAGTTCTC TCTCCCTGCT ACCCCTTTCT  3060
     CTGCAGATAG ATAGACACTG GCATTATCCC TTTAGGAAGA GGGGGGGGCA GCAAGAGAGC  3120
     CTATTTGGGA CAGCATTCCT CTCTCTCTGC TGCTGTGACA TCTCCCTCTC CTTGCTGGCT  3180
     CCATCTTTCG TCTGCACTAC CAATTCAATG CCCTTCATCC AATGGGTATC TATTTTTGTG  3240
     TGTGATTATA GTAACTACTC CCTGCTTTAT ATGCCACCCT CTTCCTTCTC TTTGACCCCT  3300
     GTGACTCTTT CTGTAACTTT CCCAGTGACT TCCCCTAGCC CTGACCAGGC ACTAGGCCTT  3360
     GGTGACTTCC TGGGGCCAAG AAACTAAGGA AACTCGGCTT TGCAACAGGC ATTACTCGCC  3420
     ATTGATTGGT GCCCACCCAG GGCACACTGT CGGAGTTCTA TCACTTGCTT GACCCCTGGA  3480
     CCCATAAACC AGTCCACTGT TATACCCGGG GCACTCTAAC CATCACAATC AATCAATCAA  3540
     ATTCCCTTAA ATTTGTATGG CACTGGAACT TTGGCAAAGC ACTTTTGACA AGTTGTGTCT  3600
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GATTGGAGCT TCATGATAGC CTTGTGACAT CTTTAGGGCA GGATTCTTAT CCCCATTTTG   3660
CAGATGAAAA CCCTGAGTCA CAGATTTCTG TGGGACTGTG GATCTCACTG GAAGCTATCC   3720
AAGAGCCCAC TGTCACCTTC TAGACCACAT GATAGGGCTA GACAGCTCAG TTCACCATGA   3780
TTCTCTTCTG TCACCTCTGC TGGCACACCA GTGGCAAGGC CCAGAATGGC GACCTCTCTT   3840
TAGCTCAATT TCTGGGCCTG AGGTGCTCAG ACTGCCCCCA AGATCAAATC TCTCCTGGCT   3900
GTAGTAACCC AGTGGAATGA ATTTGGACAT GCCCCAATGC TTCTATATGC TAAGTGAAAT   3960
CTGTGTCTGT AATTTGTTGG GGGGTGGATA GGGTGGGGTC TCCATCTACT TTTTGTCACC   4020
ATCATCTGAA ATGGGGAAAT ATGTAAATAA ATATATCAGC AAAGC              4065
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Seq ID NO: C200 DNA Sequence
Nucleic Acid Accession #: NM_021819.1
Coding sequence: 39..1619

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GTCCCTTATT CTGCCTTCTC CTCCTGCTCC TGGACCCCCA CAGCCCTGAG ACGGGGTGTC   120
CTCCTCTACG CAGGTTTGAG TACAAGCTCA GCTTCAAAGG CCCAAGGCTG GCATTGCCTG   180
GGGCTGGAAT ACCCTTCTGG AGCCATCATG GAGACGCCAT CCTGGGCCTG GAGGAAGTGC   240
GGCTGACGCC ATCCATGAGG AACCGGAGTG GCGCCGTGTG GAGCAGGGCC TCTGTCCCCT   300
TCTCTGCCTG GGAAGTAGAG GTGCAAATGA GGGTGACGGG ACTGGGGCGC CGGGGAGCCC   360
ACGGCATGGC CGTGTGGTAC ACCCGGGGCA GGGGCCCATGT AGGCTCTGTC CTTGGGGGGC   420
TGGCTTCGTG GGACGGCATC GGGATCTTCT TTGACTCTCC GGCAGAGGAT ACTCAGGACA   480
GTCCTGCCAT CCGTGTGCTG GCCAGCGACG GGCACATCCC CTCTGAGCAG CCTGGGGATG   540
GAGCTAGCCA AGGGCTGGGC TCCTGTCATT GGGACTTCCG GAACCGGCCA CACCCCTTCA   600
GAGCACGGAT CACCTACTGG GGGCAGAGGC TGCGCATGTC CTTGAACAGT GGCCTCACTC   660
CCAGTGATCC AGGTGAGTTC TGTGTGGATG TGGGGCCCCT GCTTTTGGTC CCTGGAGGTT   720
TCTTTGGGGT CTCAGCAGCC ACCGGCACCC TGGCAGATGA TCATGATGTC CTGTCCTTCC   780
TGACCTTCAG CCTGAGTGAG CCCAGCCCAG AGGTTCCCCC TCAGCCCTTC CTGGAGATGC   840
AGCAGCTCCG CCTGGCGAGG CAGCTGGAAG GGCTGTGGGC AAGGCTGGGC TTGGGCACCA   900
GGGAGGATGT AACTCCAAAA TCAGACTCTG AAGCTCAAGG AGAAGGGGAA AGGCTCTTTG   960
ACCTGGAGGA GACGCTGGGC AGACACCGCC GGATCCTGCA GGCTCTGCGG GGTCTCTCCA   1020
AGCAGCTGGC CCAGGCTGAG AGACAATGGA AGAAGCAGCT GGGGCCCCCA GGCCAAGCCA   1080
GGCCTGACGG AGGCTGGGCC CTGGATGCTT CCTGCCAGAT TCCATCCACC CCAGGGAGGG   1140
GTGGCCACCT CTCCATGTCA CTCAATAAGG ACTCTGCCAA GGTCGGTGCC CTGCTCCATG   1200
GACAGTGGAC TCTGCTCCAG GCCCTGCAAG AGATGAGGGA TGCAGCTGTC CGCATGGCTG   1260
CAGAAGCCCA GGTCTCCTAC CTGCCTGTGG GCATTGAGCA TCATTTCTTA GAGCTGGACC   1320
ACATCCTGGG CCTCCTGCAG GAGGAGCTTC GGGGCCCGGC GAAGGCAGCA GCCAAGGCCC   1380
CCCGCCCACC TGGCCAGCCC CCAAGGGCCT CCTCGTGCCT GCAGCCTGGC ATCTTCCTGT   1440
TCTACCTCCT CATTCAGACT GTAGGCTTCT TCGGCTACGT GCACTTCAGG CAGGAGCTGA   1500
ACAAGAGCCT TCAGGAGTGT CTGTCCACAG GCAGCCTTCC TCTGGGTCCT GCACCACACA   1560
CCCCCCAGGGC CCTGGGGATT CTGAGGAGGC AGCCTCTCCC TGCCAGCATG CCTGCCTGAC   1620
CCACCTCAGA GCCTGCTTTG CATCACTGGG AAGCAGGCAG TGTCTTGGGT GGGGGCTTGG   1680
TCAGTATCCT CTCCGTCTGG GTGCCCAGCT CCCACGCACA CCTGAGCTTT CGGCATGCTC   1740
CCACCTCGTT AAAGGTGATT TCCCTCTCAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA   1800
A                                                            1801
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Seq ID NO: C201 DNA Sequence
Nucleic Acid Accession #: XM_117036.1
Coding sequence: 25..495

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CGGCCCCCAC CCCCACTTCC AGCTCTGAGA CATTTGTGCA CAGGCCTGCA GGCGGCTGGG   120
ATGGCCTGGC CGGGCACGCT CTGGAGACAC ACATGCCAAG GCAGGGCCNG GGCAGCCGAG   180
GGCCCGTGGG GGCTGTTCCG ACCACACAGG TGCCCGAGGG AGGCAGGGCA GGCCCCGGTG   240
GGACCCAGCC CCGAAACGCA GGGTGTCGCC CACGTTTGCA GCCGCGCTCG CGTGTCGGTG   300
GATGAGCGGG AACCGGGGGG CGGCGCCTAC GCAATGCACG TTACGCCGCG GTGGAAGGGG   360
TGTCACCGCC ACAGCGGCCG CACCGTGCGT GGCTCTGTTT CCTGGAAACG TCCAGAACAG   420
GCAGCCCCCG AGACAGGGAG GGGCCCAGCG GTCGCCAGGG GAAGTGGGGA TGGGAATGAG   480
TGCGGATGGG GCTGAGGTTC TTCCTGAAGG ATGAATGCTC TGAAACTGTG AATAGACACA   540
CGGAACTGTG CACGTTCACN GGTGAACCGT GTGGGGAGTG AATCCATCTC AACAGAGCTG   600
TTACACAGTG AACAAGAGCA CGANGGGTGG AGGCCNCTTG TCTGCTCCTG CAGATCGAGC   660
CGGCTGCTCA GAGCCGGGAG ATGGCCACTC AGCTCCTTTA ACTG              704
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Seq ID NO: C202 DNA Sequence
Nucleic Acid Accession #: XM_167803.2
Coding sequence: 1162..1488

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AGTCACCCAC GTTCCTTGTA AATCCAAATG TTTCTATATT GTAGCTTTGC TTAAAATGGG   120
GTCGGCCCCA ACTGCATCCT CCTCTTTGGC GGGCTGGGGA GCGGCCCCCA GCCGGGACGG   180
GAGGGCAGCG ACCCCGAGGC CTCGTGGACG TGGGAGAGAG TGTGGTGGGA AGTCTTGAGC   240
GGAGGAGGGG ATCTGCCCTT CTCCACTCCT CTCTTGGATC CGCCTCGGTT TCCTGTCCCC   300
CCACCACCCG CCTGCCCCGC GGAAGACCGC CCAGTGAGCC AGCCCCCACC TTCCAGGCGC   360
CTTCGCCCTG GGGATCCAAC CAACTTGTAT CGAGTGGGCG GGGCAACGGC TCCCCATTTT   420
TCCCGAGCCC CGCCCACAGA GCTCTTAGCC AATCCTATGC AGAGAGCATC TCCTGGCAGG   480
GGTCTCTTCC CAACCAGACC CCACCCAGGC ACATTAGCGA CCAGGCTTGG GCTTCCCCAG   540
CGCCCCACCA CCACCACGTG CAGGTGGAGC TCTGGGATGC TATGTTGGGG CGGCAAGCGG   600
TGGGCCGAGG GCCGGGTAGG CTAGCACGGG AGGTAAGGGT GGTATGGGAT GGGGCGGGGG   660
CGGTCTAGGG CAATAGGAGA GCAGAGAATG GGGGAACTTG AGGGTGGGGG GAGGGCACCG   720
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GAGCCTTGCC ACCATCCCAG GACTTTGGGC AAGTCACCCG CACTCCCTGG GCCTCGGTTT    780
CCCCATCTGT AAAATGATGG TAATAATACT TCACCTACCT CATAGGGGAG GTTGTGAGGC    840
CACCATCACC TGACCTGGGG GTCAAGGCAG GAGGACTCCG AAGGTGCTAC CCGTGAGCAA    900
AGTGTAATTA CCGAATCCTG ACTGCAAGGC CCACCTGCCC CTCCCCCACA GAGCCTCCAG    960
AGCTAGCTGA GGCCAACGCA GGCCCATCCG TCTCTTCACT CTGTCGCAGG CCCTTTCATG   1020
GGCTTCGTCT GCCATCTTTG TGGGTGCCCT AGACTTAGTC CTTATCTTGT CCTGGTTTCC   1080
TTTCTTGTGA CCATCTCCCC ATGAAAGTGC TGTACAAATT CCACCCGCCC CAGGACCCCC   1140
GCACCTGCCC TCTGGCACCA GATGCCAGGG AAGGGACAGA GGAAAACAGC CACAAACAAG   1200
CCAGGGGGGC TCCCCGGAGC CCCAGGGGTG GGGATTGGTG GCCACTGTTT GTATGTTCTT   1260
GAGTGCAAGT GTTTTATAAA AAATAAAACA AAAACCCACC ATCACAAAAA AAAAAATTTT   1320
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ACAAAATTTT TCCACCACAC ATACCCTCTA AGCCAGCAAG ATTTCCTCTT TGCAAAATCA   1440
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CGTGAAAAAG T                                                        1511
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Seq ID NO: C203 DNA Sequence
Nucleic Acid Accession #: NM_024780.1
Coding sequence: 31..1023

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CCACGGCACG AAGTCTACGT TCTCCTGATC CGAAACATCT TTTTGAAAAT ATCAATCATT   120
GGCATTCTTT GTTACTATTG GCTCAACACC GTGGCCCTGT CTGGTGAAGA GTGTTGGGAA   180
ACCCTCATTG GCCAGGACAT CTACCGGCTC CTTCTGATGG ATTTTGTGTT CTCTTTAGTC   240
AATTCCTTCC TGGGGGAGTT TCTGAGGAGA ATCATTGGGA TGCAACTGAT CACAAGTCTT   300
GGCCTTCAGG AGTTTGACAT TGCCAGGAAC GTTCTAGAAC TGATCTATGC ACAAACTCTG   360
GTGTGGATTG GCATCTTCTT CTGCCCCCTG CTGCCCTTTA TATGCTTTTA TATGCTTTTC   420
ATCATGTTCT ACTCCAAAAA TATCAGCCTG ATGATGAATT CCAGCCTCC GAGCAAAGCC   480
TGGCGGGCCT CACAGATGAT GACTTTCTTC ATCTTCTTGC TCTTTTTCCC ATCCTTCACC   540
GGGGTCTTGT GCACCCTGGC CATCACCATC TGGAGATTGA AGCCTTCAGC TGACTGTGGC   600
CCTTTTCGAG GTCTGCCTCT CTTCATTCAC TCCATCTACA GCTGGATCGA CACCCTAAGT   660
ACACGGCCTG GCTACCTGTG GGTTGTTTGG ATCTATCGGA ACCTCATTGG AAGTGTGCAC   720
TTCTTTTTCA TCCTCACCCT CATTGTGCTA ATCATCACCT ATCTTTTACTG GCAGATCACA   780
GAGGGAAGGA AGATTATGAT AAGGCTGCTC CATGAGCAGA TCATTAATGA GGGCAAAGAT   840
AAAATGTTCC TGATAGAAAA AATTGATCAAG CTGCAGGATA TGGAGAAGAA AGCAAACCCC   900
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CATGATGGCA GTCTTGACTT GCGATCTAGA AGATCAGTTC AAGAAGGTAA TCCAAGGGCC  1020
TGATGACTCT TTTGGTAACC AGACACCAAT CAAATAAGGG GAGGAGACGA AAATGGAATG  1080
ATTTCTTCCA TGCCACCTGT GCCTTTAGGA ACTGCCCAGA AGAAATCCA AGGCTTTAGC  1140
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GTTGTAATAT TGAAATGAGC CTACAAAAAC CTAGGAAGAG ATAACTAGGG AATAATGTAT  1320
ATTATCTTCA AGAAGTGTGT GCAGGAAATGA TTGGTTCTTA GAAATCTCTC CTGCCAGACT  1380
TCCCAGACCT GGCAAAGGTT TAGAAACTGT TGCTAAGAAA AGTGGTCCAT CCTGAATAAA  1440
CATGTAATAC TCCAGCAGGG ATATGAAGCC TCTGAATTGT AGAACCTGCA TTTATTTGTG  1500
ACTTTGAACT AAAGACATCC CCCATGTCCC AAAGGTGGAA TACAACCAGA GGTCTCATCT  1560
CTGAACTTTC TTGCGTACTG ATTACATGAG TCTTTGGAGT CGGGGGATGGA GGAGGTTCTG  1620
CCCCTGTGAG GTGTTATACA TGACCATCAA AGTCCTACGT CAAGCTAGCT TTGCAGTGGC  1680
AGTACCGTAG CCAATGAGAT TTATCCGAGA CGCGATTATT GCTAATTGGA AATTTTCCCA  1740
ATACCCCACC GTGATGACTT GAAATATAAT CAGCGCTGGC AATTTTTGAC AGTCTCTACG  1800
GAGACTGAAT AAG                                                      1813
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Seq ID NO: C204 Protein Sequence
Protein Accession #: Eos sequence

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CCCTGCGAGT CCCAATCAAT GCGGGTGTGA CTGCTGTATG AAGTCTCAGG AAGCCCACCC   180
CAGTGGAGAA GAAGGCTTGC AGGAGGCAGG AGATGCTGTC CGATGACCAC GTGAATGAAA   240
TCATCATACA GGTTGAGAAT GTTTCCTCTG GGGTCCAAAG CCACCCATCC TCAAATCAGA   300
TTTTTCAAGA AAAGGTGCTG CTAGACTCAA GCATCAACAT GGTTTTGTCA ATATCTGACA   360
TTGATGTGAT AGACTCTCAG ACAGTCAGCA AAAGGAATGA CCAAAAGGGT AACCAGGTGC   420
TGCGGTTTTC AACATCTTTG AATGAGTCGA TGTCTCAGAC CCTTCATAGC CTAGAATGCA   480
TGGGCATAGA CACTCCTGGT TCTTCACATG AAACTGTTCA AGGACAGAAG TTAATCGCAT   540
CCCTTATACC CATGACATCC AGAGACAGAA TTAAAGCCAT CAGGAACCAG CCAAGGACCA   600
TGGAAGAGAA AAGGAACCTT AGGAAAATAG TTGACAAAGA AAAAAGCAAA CAGAACCGTC   660
GTATCCTTCA GCTCAATTGC TGTATTCAGT GTCTGAACTC CATTTCCCGG GCTTATCGGA   720
GATCCAAGAA CAGCCTGTCG GAAATTCTGA ATTCCATCAG CCTGTGGCAG AAGACGCTGA   780
AGATCATTGG AGGCAAGTTT GGAACCAGCG TCCTCTCCTA TTTCAACTTT CTGAGATGGT   840
TTTTGAAGTT CAACATTTTC TCATTCATCC TGAACTTCAG CTTCATCATA ATCCCTCAGT   900
TTACCGTGGC CAAAAAGAAC ACCCTCCAGT TCACTGGGCT GGAGTTTTTC ACTGGGGTGG   960
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GGAACAGCGG GGCATCCTAC AACATGCTTCA TGGCCTACAT CTTCACAATC GGAGCATGCT  1080
TGACCACCTG CTTCTTCAGT TTGCTGTTCA GCATGGCCAA GTATTTCCGG AACAACTTCA  1140
TTAATCCCCA CATTTACTCC GGAGGGATCA CCAAGCTGAT CTTTTGCTGG GACTTCACTG  1200
TCACTCATGA AAAAGCTGTG AAGCTAAAAC AGAAGAATCT TAGCACTGAG ATAAGGGAGA  1260
ACCTGTCAGA GCTCCGTCAG GAGAATTCCA AGTTGACGTT CAATCAGCTG CTGACCCGCT  1320
TCTCTGCCTA CATGGTAGCC TGGGTTGTCT CTACAGGAGT GGCCATAGCC TGCTGTGCAG  1380
CCGTTTATTA CCTGGCTGAG TACAACTTAG AGTTCCTGAA GACACACAGT AACCCTGGGG  1440
CGGTGCTGTT ACTGCCTTTC GTTGTGTCCT GCATTAATCT GGCCGTGCCA TGCATCTACT  1500
CCATGTTCAG GCTTGTGGAG AGGTACGAGA TGCCACGGCA CGAAGTCTAC GTTCTCCTGA  1560
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TCCGAAACAT CTTTTTGAAA ATATCAATCA TTGGCATTCT TTGTTACTAT TGGCTCAACA    1620
CCGTGGCCCT GTCTGGTGAA GAGTGTTGGG AAACCCTCAT TGGCCAGGAC ATCTACCGGC    1680
TCCTTCTGAT GGATTTGTG TTCTCTTTAG TCAATTCCTT CCTGGGGGAG TTTCTGAGGA     1740
GAATCATTGG GATGCAACTG ATCACAAGTC TTGGCCTTCA GGAGTTTGAC ATTGCCAGGA    1800
ACGTTCTAGA ACTGATCTAT GCACAAACTC TGGTGTGGAT TGGCATCTTC TTCTGCCCCC    1860
TGCTGCCCTT TATCCAAATG ATTATGCTTT TCATCATGTT CTACTCCAAA AATATCAGCC    1920
TGATGATGAA TTTCCAGCCT CCGAGCAAAG CCTGGCGGGC CTCACAGATG ATGACTTTCT    1980
TCATCTTCTT GCTCTTTTTC CCATCCTTCA CCGGGGTCTT GTGCACCCTG GCCATCACCA    2040
TCTGGAGATT GAAGCCTTCA GCTGACTGTG GCCCTTTTCG AGGTCTGCCT CTCTTCATTC    2100
ACTCCATCTA CAGCTGGATC GACACCCTAA GTACACGGCC TGGCTACCTG TGGGTTGTTT    2160
GGATCTATCG GAACCTCATT GGAAGTGTGC ACTTCTTTTT CATCCTCACC CTCATTGTGC    2220
TAATCATCAC CTATCTTTAC TGGCAGATCA CAGAGGGAAG GAAGATTATG ATAAGGCTGC    2280
TCCATGAGCA GATCATTAAT GAGGGCAAAG ATAAAATGTT CCTGATAGAA AAATTGATCA    2340
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GAAGATCAGT TCAAGAAGGT AATCCAAGGG CCTGATGACT CTTTTGGTAA CCAGACACCA    2520
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GAACTGCCCA GAAGAAAATC CAAGGCTTTA GCCAGGAGCG GAAACTGACT ACCATGTAAT    2640
TATCAAAGTA AAATTGGGCA TTCCATGCTA TTTTTAATAC CTGGATTGCT GATTTTTCAA    2700
GACAAAATAC TTGGGGTTTT CCAATAAAGA TTGTTGTAAT ATTGAAAWRA RMMWAMAAAA    2760
ACCTAGGAAG AGATAACTAG GGAATAATGT ATATTATCTT CAAGAAGTGT GTGCAGGAAT    2820
GATTGGTTCT TAGAAATCTC TCCTGCCAGA CTTCCCAGAC CTGGCAAAGG TTTAGAAACT    2880
GTTGCTAAGA AAAGTGGTCC ATCCTGAATA AACATGTAAT ACTCCAGCAG GGATATGAAG    2940
CCTCTGAATT GTAGAACCTG CATTTATTTG TGACTTTGAA CTAAAGACAT CCCCCATGCC    3000
CCAAAGGTGG AATACAACCA GAGGTCTCAT CTCTGAACTT TCTTGCGTAC TGATTACATG    3060
AGTCTTTGGA GTCGGGGATG GAGGAGGTTC TGCCCCTGTG AGGTGTTATA CATGACCATC    3120
AAAGTCCTAC GTCAAGCTAG CTTTGCAGTG GCAGTACCGT AGCCAATGAG ATTTATCCGA    3180
GACGCGATTA TTGCTAATTG GAAATTTTCC CAATACCCCA CCGTGATGAC TTGAAATATA    3240
ATCAGCGCTG GCAATTTTTG ACAGTCTCTA CGGAGACTGA ATAAG                    3285
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Seq ID NO: C205 DNA Sequence
Nucleic Acid Accession #: NM_002250.1
Coding sequence: 397..1680

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TGTGACAAAG CCCATCGTGT GTCTGTGTGT GTCTTTATCC ACGTGGATGG ACGTCTCTTT    120
CTTGCTCTGC CCCAAGACAC ACCCTAGCCC CTCCTTATTC TCAAAGGGG GAGCTGGGGA     180
GCCTCCCCCT ACCCTGGGGC CTCCCCTGCC CCTCCCCGCC CTGCCTGGCC GTCACCACTC    240
CCCAGAGGGC ACAGGGCTCT GCTGTGCCTC AGAGCAAAAG TCCCAGAGCC AGCAGAGCAG    300
GCTGACGACC TGCAAGCCAC AGTGGCTGCC CTGTGCGTGC TGCGAGGTGG GGGACCCTGG    360
GCAGGAAGCT GGCTGAGCCC CAAGACCCCG GGGGCCATGG GCGGGGATCT GGTGCTTGGC    420
CTGGGGGCCT TGAGACGCCG AAAGCGCTTG CTGGAGCAGG AGAAGTCTCT GGCCGGCTGG    480
GCACTGGTGC TGGCAGGAAC TGGCATTGGA CTCATGGTGC TGCATGCAGA GATGCTGTGG    540
TTCGGGGGGT GCTCGTGGGC GCTCTACCTG TTCCTGGTTA AATGCACGAT CAGCATTTCC    600
ACCTTCTTAC TCCTCTGCCT CATCGTGGCC TTTCATGCCA AAGAGGTCCA GCTGTTCATA    660
ACCGACAACG GCTGCGGGA CTGGCGCGTG GCGCTGACCG GGCGGCAGGC GGCGCAGATC     720
GTGCTGGAGC TGGTGGTGTG TGGGCTGCAC CCGGCGCCCG TGCGGGGCCC GCCGTGCGTG    780
CAGGATTTAG GGGCGCCGCT GACCTCCCCG CAGCCCTGGC CGGGATTCCT GGGCCAAGGG    840
GAAGCGCTGC TGTCCCTGGC CATGCTGCTG CGTCTCTACC TGGTGCCCCG CGCCGTGCTC    900
CTGCGCAGCG GCGTCCTGCT CAACGCTTCC TACCGCAGCA TCGGCGCTCT CAATCAAGTC    960
CGCTTCCGCC ACTGGTTCGT GGCCAAGCTT TACATGAACA CGCACCCTGG CCGGCTGCTG    1020
CTCGGCCTCA CGCTTGGCCT CTGGCTGACC ACCGCCTGGG TGCTGTCCGT GGCCGAGAGG    1080
CAGGCTGTTA ATGCCACTGG GCACCTTTCA GACACACTTT GGCTGATCCC CATCACATTC    1140
CTGACCATCG GCTATGGTGA CGTGGTGCCG GGCACCATGT GGGGCAAGAT CGTCTGCCTG    1200
TGCACTGGAG TCATGGGTGT CTGCTGCACA GCCCTGCTGG TGGCCGTGGT GGCCCGGAAG    1260
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GTGGACATCT CCAAGATGCA CATGATCCTG TATGACCTGC AGCAGAATCT GAGCAGCTCA    1560
CACCGGGCCC TGGAGAAACA GATTGACACG CTGGCGGGGA AGCTGGATGC CCTGACTGAG    1620
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CTGCCACTCC TGACCCAGCC CTGAACAAAG CACCTCAAGT GCAAGGACCA AAGGGGGCCC    1800
TGGCTTGGAG TGGGTTGGCT TGCTGATGGC TGCTGGAGGG GACGCTGGCT AAAGTGGGTA    1860
GGCCTTGGCC CACCTGAGGC CCCAGGTGGG AACATGGTCA CCCCCACTCT GCATACCCTC    1920
ATCAAAAACA CTCTCACTAT GCTGCTATGG ACGACCTCCA GCTCTCAGTT ACAAGTGCAG    1980
GCGACTGGAG GCAGGACTCC TGGGTCCCTG GGAAAGAGGG TACTAGGGGC CCGGATCCAG    2040
GATTCTGGGA GGCTTCAGTT ACCGCTGGCC GAGCTGAAGA ACTGGGTATG AGGCTGGGGC    2100
GGGGCTGGAG GTGGCGCCCC CTGGTGGGAC AACAAAGAGG ACACCATTTT TCCAGAGCTG    2160
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AATAAATGTT AAAGCCAG                                                  2238
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Seq ID NO: C206 DNA Sequence
Nucleic Acid Accession #: NM_025257.1
Coding sequence: 1..2139

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ATGGGGGGAA AGCAGCGGGA CGAGGATGAC GAGGCCTACG GGAAGCCAGT CAAATACGAC    60
CCCTCCTTTC GAGGCCCCAT CAAGAACAGA AGCTGCACAG ATGTCATCTG CTGCGTCCTC    120
TTCCTGCTCT TCATTCTAGG TTACATCGTG GTGGGGATTG TGGCCTGGTT GTATGGAGAC    180
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            CCCCGGCAAG TCCTCTACCC CAGGAACTCT ACTGGGGCCT ACTGTGGCAT GGGGGAGAAC   240
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            ATCTCAGTTG CTGAGAACGG CCTACAGTGC CCCACACCCC AGGTGTGTGT GTCCTCCTGC   360
            CCGGAGGACC CATGGACTGT GGGAAAAAAC GAGTTCTCAC AGACTGTTGG GGAAGTCTTC   420
5           TATACAAAAA ACAGGAACTT TTGTCTGCCA GGGGTACCCT GGAATATGAC GGTGATCACA   480
            AGCCTGCCAAC AGGAACTCTG CCCCAGTTTC CTCCTCCCCT CTGCTCCAGC TCTGGGACGC   540
            TGCTTTCCAT GGACCAACAT TACTCCACCG GCGCTCCCAG GGATCACCAA TGACACCACC   600
            ATACAGCAGG GGATCAGCGG TCTTATTGAC AGCCTCAATG CCCGAGACAT CAGTGTTAAG   660
            ATCTTTGAAG ATTTTGCCCA GTCCTGGTAT TGGATTCTTG TTGCCCTGGG GGTGGCTCTG   720
10          GTCTTGAGCC TACTGTTTAT CTTGCTTCTG CGCCTGGTGG CTGGGCCCCT GGTGCTGGTG   780
            CTGATCCTGG GAGTGCTGGG CGTGCTGGCA TATGGCATCT ACTACTGCTG GGAGGAGTAC   840
            CGAGTGCTGC GGGACAAGGG CGCCTCCATC TCCCAGCTGG GTTTCACCAC CAACCTCAGT   900
            GCCTACCAGA GCGTGCAGGA GACCTGGCTG GCCGCCCTGA TCGTGTTGGC GGTGCTTGAA   960
            GCCATCCTGC TGCTGGTGCT CATCTTCCTG CGGCAGCGGA TTCGTATTGC CATCGCCCTC   1020
15          CTGAAGGAGG CCAGCAAGGC TGTGGGACAG ATGATGTCTA CCATGTTCTA CCCACTGGTC   1080
            ACCTTTGTCC TCCTCCTCAT CTGCATTGCC TACTGGGCCA TGACTGCTCT GTATCCTCTG   1140
            CCCACGCAGC CAGCCACTCT TGGATATGTG CTCTGGGCAT CCAACATCAG CTCCCCCGGC   1200
            TGTGAGAAAG TGCCAATAAA TACATCATGC AACCCCACGG CCCACCTTGT GAACTCCTCG   1260
            TGCCCAGGGC TGATGTGCGT CTTCCAGGGC TACTCATCCA AAGGCCTAAT CCAACGTTCT   1320
20          GTCTTCAATC TGCAAATCTA TGGGGTCCTG GGGCTCTTCT GGACCCTTAA CTGGGTACTG   1380
            GCCCTGGGCC AATGCGTCCT CGCTGGAGCC TTTGCCTCCT TCTACTGGGC CTTCCACAAG   1440
            CCCCAGGACA TCCCTACCTT CCCCTTAATC TCTGCCTTCA TCCGTTACCAC   1500
            ACTGGGTCAT TGGCATTTGG AGCCCTCATC CTGACCCTTG TGCAGATAGC CCGGGTCATC   1560
            TTGGAGTATA TTGACCACAA GCTCAGAGGA GTGCAGAACC CTGTAGCCCG CTGCATCATG   1620
25          TGCTGTTTCA AGTGCTGCCT CTGGTGTCTG GAAAAATTTA TCAAGTTCCT AAACCGCAAT   1680
            GCATACATCA TGATCGGCCAT CTACGGGAAG AATTTCTGTG TCTCAGCCAA AAATGCGTTC   1740
            ATGCTACTCA TGCGAAACAT TGTCAGGGTG GTCGTCCTGG ACAAAGTCAC AGACCTGCTG   1800
            CTGTTCTTTG GGAAGCTGCT GGTGGTCGGA GGCGTGGGGG TCCTGTCCTT CTTTTTTTTC   1860
            TCCGGTCGCA TCCCGGGGCT GGGTAAAGAC TTTAAGAGCC CCCACCTCAA CTATTACTGG   1920
30          CTGCCCATCA TGACCTCCAT CCTGGGGGCC TATGTCATCG CCAGCGGCTT CTTCAGCGTT   1980
            TTCGGCATGT GTGTGGACAC GCTCTTCCTC TGCTTCCTGG AAGACCTGGA GGGGAACAAC   2040
            GGCTCCCTGG ACCGGCCCTA CTACACATGTCC AAGAGCCTTC TAAAGATTCT GGGCAAGAAG   2100
            AACGAGGCGC CCCCGGACAA CAAGAAGAGG AAGAAGTGAC AGCTCCGGCC CTGATCCAGG   2160
            ACTGCACCCC ACCCCCACCG TCCAGCCATC CAACCTCACT TCGCCTTACA GGTCTCCATT   2220
35          TTGTGGTAAA AAAAGGTTTT AGGCCAGGCG CCGTGGCTCA CGCCTGTAAT CCAACACTTT   2280
            GAGAGGCTGA GGCGGGCGGA TCACCTGAGT CAGGAGTTCG AGACCAGCCT GGCCAACATG   2340
            GTGAAAC                                                              2347
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        1          11         21         31         41         51
        |          |          |          |          |          |
        CAGGAAGGTT CCTCTCCCAG TGGCCATGGG TAGCAACAGT GGGCAGGCTG GCCGCCACAT   60
        CTATAAATCC CTAGCTGATG ATGGCCCCTT TGACTCTGTG GAGCCGCCTA AAAGACCCAC   120
        CAGCAGACTC ATCATGCACA GCATGGCCAT GTTCGGAAGA GAGTTCTGCT ACGCGGTGGA   180
        GGCAGCGTAT GTGACCCCAG TCCTGCTCAG CGTAGGTCTG CCCAGCAGCC TGTACAGCAT   240
        TGTGTGGTTC CTCAGCCCCA TCCTGGGATT CCTGCTGCAG CCCGTGGTCG GATCGGCCAG   300
        CGACCACTGC CGGTCCAGGT GGGGCCGGCG GAGACCCTAC ATCCTCACCC TGGGAGTCAT   360
        GATGCTCGTG GGCATGGGCTC TGTACCTCAA TGGGGCTACT GTTGTAGCAG CTTTGATTGC   420
        TAACCCAAGG AGGAAGCTGG TTTGGGCCAT AAGTGTCACC ATGATAGGTG TCGTTCTCTT   480
        TGATTTTGCT GCCGACTTCA TTGATGGGCC CATCAAAGCC TACTTATTTG ATGTCTGCTC   540
        CCATCAGGAC AAGGAGAAGG GCCTCCACTA CCATGCCCTC TTCACAGGTT TTGGAGGTGC   600
        CCTGGGTTAC CTTTTGGGTG CTATAGACTG GGCCCATCTG GAGCTGGGAA GACTGTTGGG   660
        TACAGAATTC CAGGTCATGT TCTTCTTCTC TGCATTGGTG CTCACTTTGT GTTTTACTGT   720
        TCATCTGTGC AGTATCTCTG AAGCCCCACT TACAGAGGTT GCAAAGGGCA TTCCCCCACA   780
        GCAAACCCCT CAGGACCCTC CATTGTCATC AGATGGAATG TACGAGTATG GTTCTATCGA   840
        GAAAGTTAAA AATGGTTACG TAAATCCAGA GCTGGCAATG CAGGGAGCAA AAAACAAAAA   900
        TCATGCTGAA CAGACTCGCA GGGCAATGAC ATTAAAGTCA CTGCTGAGAG CACTGGTGAA   960
        CATGCCTCCT CACTACCGCT ACCTTTGCAT CAGCCACCTC ATTGGATGGA CGGCCTTCCT   1020
        GTCCAACATG CTGTTCTTCA CAGATTTCAT GGGCCAGATT GTGTACCGCG GGGATCCCTA   1080
        TAGTGCACAC AACTCCACAG AGTTTCTCAT CTACGAAAGA GGAGTCGAGG TTGGATGTTG   1140
        GGGCTTCTGC ATCAACTCCG TGTTTTCCTC ACTTTATTCT TACTTTCAGA AAGTTTTGGT   1200
        ATCCTACATT GGATTAAAGG GTCTTTACTT CACGGGATAT TTGCTGTTTG GCCTGGGGAC   1260
        GGGATTATT GGGCTCTTCC CGAATGTCTA CTCCACCCTG GTCCTGTGCA GCCTGTTTGG   1320
        TGTAATGTCC AGCACCCTGT ACACTGTGCC CTTTAACCTC ATTACTGAGT ACCACCGCGA   1380
        GGAAGAAAAG GAGAGGCAGC AGGCCCCAGG AGGGGACCCA GACAACAGCG TGAGAGGGAA   1440
        GGGCATGGAC TGCGCCACCC TCACATGCAT GGTGCAGCTG GCTCAGATCC TGGTCGGAGG   1500
        TGGCCTGGGC TTTCTGGTCA ACACAGCCGG GACCGTTGTC GTCGTGGTGA TCACAGCGTC   1560
        TGCGGTGGCA CTGATAGGCT GTTGCTTTGT CGCTCTCTTT GTTAGATATG TGGATTAGGT   1620
        CAATAAAGAG ACAATGACCC TAAAAAAAAA                                       1650
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        1          11         21         31         41         51
        |          |          |          |          |          |
        CGCCGCGGGG CCGGATCCTC CGCGCGGCCG AGTCCATCTC CTGGGAAATG GGGCGGACAG   60
        TGTTTCCTTG ACTGACTATT GTGAGCGCCC TCTCTCTCCG GCGGAGCGGA GACCATGGCC   120
        CCCACTCAGG CCCCCGGGCC CCGCTGGAAT TCGGAGGGCC CCTGGGTAAT GGGGCAGAGA   180
        GATGGGACCT GGGGCAAAGG CTAAGCGAAG GAGAGCTGGA GCGGGTGAAC TAAGAGCGGG   240
        GGCGAGATCT GAGGATGGAA GGCTTTGGGG GTGTCGGAGG CAGAGGGACC CGGGGGTTTG   300
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CAGCGAAGGG TGTCTGGAGA GGGAGAGCTG AGGAGGGGCC GGTTCTGGGG GCTGCAGAAC    360
GGGGATTTAT GGTGTCGACT GGGAGCAGGA GGAGGGTCTT CGAGGGGCCT GGGGGCGGGG    420
GACTAAGATG GACGCCTGGG AAGGGAACTG GGAGGCAGCG GGGTGCCTGG GGGCCGAGGG    480
CTGAGGACGG GGTGCGGAGG CGCACTCTGG GAATGCCGAG AGGGTCCCGC AGAGACGTCA    540
GGGCGCCGTG CGGGCCGGCG GGGAGCTGGG GGGCTAGGGG CGGACGCCGA CGTGATGGCC    600
CTTCCCGCAG GCGCCGCGGC TCTGCTACTG CTGCTGCCCG CCACCATGTT CCACCTGCTC    660
CTGGCGGCCC GTTCGGGCCC CGCGCGCCTG CTGGGTCCAC CCGCGTCCT GCCCGGGCTG    720
GAGGTGCTGT GGAGCCCACG GGCGCTGCTG CTGTGGCTCG CCTGGCTCGG CCTGCAGGCGG    780
GCGCTCTACC TACTGCCGGC GCGCAAGGTG CGGGCCCCGC TCGCGGACCAC TCGGGGGAGG    840
GAAGCGAATG GGCTCGGCGA GGGAAAGGAC GCCCCGGGCC TTATCAGAGC CCCCTTGGAC    900
CCGCAGTGGC CGAGGGGCAG GAATTGAAGG ACAAGAGTCG CCTGCGCTAT CCTATTAACG    960
GCTTCCAGGC CCTGGTGCTG ACAGCCCTGT TGGTGGGGCT GGGGATGTCA GCGGGGCTGC   1020
CTCTGGGGGC GCTCCCGGAA ATGCTCCTGC CCTTGGCGTT TGTCGCCACC CTCACCGCTT   1080
TCATCTTCAG CCTCTTTCTC TACATGAAGG CGCAGGTAGC CCCAGTTTCG GCCCTGGCAC   1140
CTGGGGGGAA CTCAGGCAAT CCGATTTACG ACTTTTTTCT GGGACGAGAG CTCAACCCTC   1200
GTATCTGTTT CTTCGACTTC AAATATTTCT GTGAACTGCG ACCCGGCCTC ATCGGCTGGG   1260
TCCTCATCAA CCTGGCCCTG TTGATGAAGG AGGCAGAGCT TCGAGGCAGT CCCTCACTGG   1320
CCATGTGGCT GGTCAATGGC TTCCAGTTGC TCTACGTGGG TGATGCCCTC TGGCACGAGG   1380
AGGCCGTCCT CACCACCATG GATATCACAC ATGACGGGTT TGGCTTCATG CTGGCGTTTG   1440
GGGACATGGC CTGGGTGCCC TTCACCTACA GCCTGCAGGC CCAGTTCCTG CTGCACCACC   1500
CGCAGCCCCT GGGGGTGCCC ATGGCCTCTG TCATCTGCCT CATCAATGCT ACTGGTTACT   1560
ACATCTTCCG TGGGGCGAAT TCCCAGAAAA ACACTTTCCG AAAGAATCCT TCTGACCCCA   1620
GAGTGGCTGG GCTTGAGACC ATCTCTACAG CCACAGGGCG GAAACTGCTG GTGTCTGGGT   1680
GGTGGGGTAT GGTCCGCCAT CCCAACTATC TTGGAGACCT CATCATGGCT CTGGCTTGGT   1740
CCTTGCCCTG CGGGGTGTCA CACCTGCTGC CCTACTTCTA CCTCCTCTAC TTCACCGCGC   1800
TGCTGGTGCA CCGTGAGGCC CGGGATGAGC GGAGTGCCTG CAGAAGTACG GCCTGGCCTG   1860
GCAGGAGTAC TGCCGGCGTG TGCCTTACCG CATCATGCCC TACATCTACT GAAGCGGGTC   1920
CACCACCCCA GGTGGGGCAT GTGCCCACTC ATCCACCAGC ACACCCCAGA CCAGGAGCCT   1980
CGACACACTT GGGACTCAAG GGCTTGCACC CCACCCAGCC CTGAGGATGA ACAACCTCAG   2040
AGAAGAGGTG GTTTAGAGCA AGGAAAAAAA TGAAACCAGT GACCAAAAAA AAAAAAAAAA   2100
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Seq ID NO: C209 DNA Sequence
Nucleic Acid Accession #: NM_015720.1
Coding sequence: 21..1838

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TTTGCCGCT GCTGCTTCTG CTGGTTGGGG GAGCCGTTCCT GGGTGCCTGT GTGGCTGGGT   120
CTGATGAGCC TGGCCCAGAG GGCCTCACCT CCACCTCCCT GCTAGACCTC CTGCTGCCCA   180
CTGGCTTGGA GCCACTGGAC TCAGAGGAGC CTAGTGAGAC CATGGGCCTG GGAGCTGGGC   240
TGGGAGCCCC TGGCTCAGGC TTCCCCAGCG AAGAGAATGA AGAGTCTCGG ATTCTGCAGC   300
CACCACAGTA CTTCTGGGAA GAGGAGGAAG AGCTGAATGA CTCAAGTCTG GACCTGGGAC   360
CCACTGCAGA TTATGTTTTT CCTGACTTAA CTGAGAAGGC AGGTTCCATT GAAGACACTA   420
GCCAGGCTCA AGAGCTGCCA AACCTCCCCT CTCCCTTGCC CAAGATGAAT CTGGTTGAGC   480
CTCCCTGGCA TATGCCTCCC AGAGAGGAGG AAGAAGAGGA AGAGGAAGAG GAGGAGAGGG   540
AGAAGAAGA GGTAGAGAAA CAAGAGGAGG AGGAAGAGGA GGAGCTGCTC CCTGTGAATG    600
GATCCCAAGA AGAAGCCAAG CCTCAGGTCC GTGACTTTTC TCTCACCAGC AGCAGCCAGA    660
CCCCAGGGGC CACCAAAAGC AGGCATGAAG ACTCCGGGGA CCAGGCCTCA TCAGGTGTGG    720
AGGTGGAGAG CAGCATGGGG CCCAGCTTGC TGCTGCCTTC AGTCACCCCA ACTACAGTGA    780
CTCCGGGGGA CCAGGACTCC ACCAGCCAAG AGGCAGAGGC CACAGTGCTG CCAGCTGCAG    840
GGCTTGGGGT AGAGTTCGAG GCTCCTCAGG AAGCAAGCGA GGAAGCCACT GCAGGAGCAG    900
CTGGTTTGTC TGGCCAGCAC GAGGAGGTGC CGGCCTTGCC TTCATTCCCT CAAACCACAG    960
CTCCCAGTGG GGCCGAGCAC CCAGATGAAG ATCCCCTTGG CTCTAGAACC TCAGCCTCTT   1020
CCCCACTGGC CCCTGGGAGC ATGGAACTGA CACCTTCCTC TGCTACCTTG GGACAAGAAG   1080
ATCTCAACCA GCAGCTCCTA GAAGGGCAGG CAGCTGAAGC TCAATCCAGG ATACCCTGGG   1140
ATTCTACGCA GGTGATCTGC AAGGACTGGA GCAATCTGGC TGGGAAAAAC TACATCATTC   1200
TGAACATGAC AGAGAACATA GACTGTGAGG TGTTCCGGCA GCACCGGGGG CCACAGCTCC   1260
TGGCCCTGGT GGAAGAGGTG CTGCCCCGCC ATGGCAGTGG CCACCATGGG GCCTGGCACA   1320
TCTCTCTGAG CAAGCCCAGC GAGAAGGAGC AGCACCTTCT CATGACACTG GTGGGCGAGC   1380
AGGGGGTGTG GCCCACTCAA GATGTCCTTT CCATGCTGGG TGACATCCGC AGGAGCCTGG   1440
AGGAGATTGG CATCCAGAAC TATTCCACAA CCAGCAGCTG CCAGGCGCGG GCCAGCCAGG   1500
TGCGCAGCGGA CTACGGCACG CTCTTCGTGG TGCTGGTGGT CATTGGGGCG ATCTGCATCA   1560
TCATCATTGC GCTTGGCCTG CTCTACAACT GCTGGCAGCG CCGGCTGCCC AAGCTCAAGC   1620
ACGTGTCGCA CGGCGAGGAG CTGCGCTTCG TGGAGAACGG CTGCCACGAC AACCCCACGC   1680
TGGACGTGGC CAGCGACAGC CAGTCGGAGA TGCAGGAGAA GCACCCCAGC CTGAACGGCG   1740
GCGGGGCCCT CAACGGCCCG GGGAGCTGGG GGGCGCTCAT GGGGGGGCAAG CGGGACCCCG   1800
AGGACTCGGA CGTGTTCGAG GAGGACACGC ACCTGTGAGC GCAGCGAGGC GCAGGCCGAG   1860
TGGGCCGGCCA GGACCAAGCG AGGTGGACCC CGAAACGGAC GGCCCGGAGC CCGCACCAGC   1920
CCCGCGCCTA CCCGGCCGCC CCCGCGCCTG GCCCTCGGCG CGGGCTCCTT CCCGCTTCCC   1980
CCGACTTCAC ACGGCGGCTT CGGACCAACT CCCTCACTCC CGCCCGAGGG GCAGGCCTCA   2040
AAGCCCGCCT TGGCCCCGCT TTCCCGCCCC TGAACCCCGG CCCCGCGGGC GGCGGGCGCG   2100
CTTCCTGCGC CCCGGGACTC AATTAAACCC GCCCGGAGAC CACGCGGGCC CAGCGAAAAA   2160
AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA   2220
AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAA               2269
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Seq ID NO: C210 DNA Sequence
Nucleic Acid Accession #: NM_001197.3
Coding sequence: 61..543

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ATGTCTGAAG TAAGACCCCT CTCCAGAGAC ATCTTGATGG AGACCCTCCT GTATGAGCAG   120
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         CTCCTGGAAC CCCCGACCAT GGAGGTTCTT GGCATGACTG ACTCTGAAGA GGACCTGGAC   180
         CCTATGGAGG ACTTCGATTC TTTGGAATGC ATGGAGGGCA GTGACGCATT GGCCCTGCGG   240
         CTGGCCTGCA TCGGGGACGA GATGGACGTG AGCCTCAGGG CCCCGCGCCT GGCCCAGCTC   300
5        TCCGAGGTGG CCATGCACAG CCTGGGTCTG GCTTTCATCT ACGACCAGAC TGAGGACATC   360
         AGGGATGTTC TTAGAAGTTT CATGGACGGT TTCACCACAC TTAAGGAGAA CATAATGAGG   420
         TTCTGGAGAT CCCCGAACCC CGGGTCCTGG GTGTCCTGCG AACAGGTGCT GCTGGCGCTG   480
         CTGCTGCTGC TGGCGCTGCT GCTGCCGCTG CTCAGCGGGG GCCTGCACCT GCTGCTCAAG   540
         TGAGGCCCCG GCGGCTCAGG GCGGGGCTGG CCCCACCCCC ATGACCACTG CCCTGGAGGT   600
10       GGCGGCCTGC TGCTGTTATC TTTTTAACTG TTTTCTCATG ATGCCTTTTT ATATTTAAAC   660
         CCCGAGATAG TGCTGGAACA CTGCTGAGGT TTTATACTCA GGTTTTTTGT TTTTTTTTTA   720
         TTCCAGTTTT CGTTTTTTCT AAAAGATGAA TTCCTATGGC TCTGCAATTG TCACCGGTTA   780
         ACTGTGGCCT GTGCCCAGGA AGAGCCATTC ACTCCTGCCC CTGCCCACAC GGCAGGTAGC   840
         AGGGGGAGTG CTGGTCACAC CCCTGTGTGA TATGTGATGC CCTCGGCAAA GAATCTACTG   900
15       GAATAGATTC CGAGGAGCAG GAGTGCTCAA TAAAATGTTG GTTTCCAGCA AAAAAAAAAA   960
         AAA                                                                 963
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Seq ID NO: C211 DNA Sequence
Nucleic Acid Accession #: AF272357
Coding sequence: 83..1060

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         GCCCCGGCGG CGGCGCTGAA GGATGGCGAC GCCGCTGCCT CCGCCCTCCC CGCGGCACCT   120
25       GCGGCTGCTG CGGCTGCTGC TCTCCGGCCT CGTCCTCGGC GCCGCCCTGC GTGGAGCCGC   180
         CGCCGGCCAC CCGGATGTAG CCGCCTGTCC CGGGAGCCTG GACTGTGCCC TGAAGAGGCG   240
         GGCAAGGTGT CCTCCTGGTG CACATGCCTG TGGGCCCTGC CTTCAGCCCT TCCAGGAGGA   300
         CCAGCAAGGG CTCTGTGTGC CCAGGATGCG CCGGCCTCCA GGCGGGGGCC GGCCCCAGCC   360
         CAGACTGAA GATGAGATTG ACTTCCTGGC CCAGGAGCTT GCCCGGAAGG AGTCTGACA   420
30       ATCAACTCCG CCCCTACCCA AGGACCGACA GCGGCTCCCG GAGCCTGCCA CCCTGGGCTT   480
         CTCGGCACGG GGGCAGGGGC TGGAGCTGGG CCTCCCCTCC ACTCCAGGAA CCCCCACGCC   540
         CACGCCCCAC ACCTCCCTGG GCTCCCCTGT GTCATCCGAC CCGGTGCACA TGTCGCCCCT   600
         GGAGCCCCGG GGAGGGCAAG GCGACGGCCT CGCCCTTGTG CTGATCCTGG CGTTCTGTGT   660
         GGCCGGTGCA GCCGCCCTCT CCGTAGCCTC CCTCTGCTGG TGCAGGCTGC AGCGTGAGAT   720
35       CCGCCTGACT CAGAAGGCCG ACTACGCCAC TGCGAAGGCC CCTGGCTCAC CTGCAGCTCC   780
         CCGGATCTCG CCTGGGGACC AGCGGCTGGC ACAGAGCGCG GAGATGTACC ACTACCAGCA   840
         CCAACGGCAA CAGATGCTGT GCCTGGAGCG GCATAAAGAG CCACCCAAGG AGCTGGACAC   900
         GGCCTCCTCG GATGAGGAGA ATGAGGACGG AGACTTCACG GTGTACGAGT GCCCGGGCCT   960
         GGCCCCGACC GGGGAAATGG AGGTGCGCAA CCCTCTGTTC GACCACGCCG CACTGTCCGC   1020
40       GCCCCTGCCG GCCCCCAGCT CACCGCCTGC ACTGCCATGA CCTGGAGGCA GACAGACGCC   1080
         CACCTGCTCC CCGACCTCGA GGCCCCCGGG GAGGGGCAGG GCCTGGAGCT TCCCACTAAA   1140
         AACATGTTTT GATGCTGTGT GCTTTTGGCT GGGCCTCGGG CTCCAGGCCC TGGGACCCCT   1200
         TGCCAGGGAG ACCCCCGAAC CTTTGTGCCA GGACACCTCC TGGTCCCCTG CACCTCTCCT   1260
         GTTCGGTTTA GACCCCCAAA CTGGAGGGGG CATGGAGAAC CGTAGAGCGC AGGAACGGGT   1320
         GGGTAATTCT AGAGACAAAA GCCAATTAAA GTCCATTTCA GAAAAAAAAA A             1371
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Seq ID NO: C212 DNA Sequence
Nucleic Acid Accession #: NM_004445.1
Coding sequence: 799..3819

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         GACCCGGGAC CCAGCTTGGC GACGGCGATT CTCGACGCGG GCCCCCAGGA TTCTCCCGGC   120
55       GCCCCACCTC TGGAGCAGCC CCTGCCGCCA GCGTCAGGTC CACCCCGGAA TCCCAGGGAC   180
         TCTCGGCGCC GAACGGACCC GGGCCGGTGC AACGGGGTCC CCGGACTGGA GAAGACGCGG   240
         GTGGCACCGT GCGAGCTCCA GGAGCCCCGG GTCCACTGCG AGGCCTCGGG GGGCGCAGAC   300
         CTGCAGAGAC TGCGGCCAAC GGGAAGAAAT AAAGGGATTA TAGTCCACCC AATTCACAGA   360
         CTTCTGAGAC TCAGACACGA GGAGAGATAG AGAACCGCCA ATCTCTAGAT CAACAAGCAA   420
60       AGGAGGTGCC AAGCCTGTTT GTCTTCATTG TGACACTGGA GTCTAGATGC TGGGAAGTCC   480
         AAGATCAGGG TGCCGGCATG GTCAGTTCCT GGCGAAGCCT CTCTTCTAGG TTTCAGACTG   540
         CCCTCTTCTT TGTTGTGTCC TCGAATGGCA GAAAAAGGGG TGGCTGTTGG AGGAAGGGAG   600
         GAGAGTAAAT GAAGAGAAAG AACTGGAAATA ACCCCTTGCA GAAAAAAAA AAAAGGGAAG   660
         CTTAGCTGTA CACCCTGAGT CTTGCAAAAG CTGCAGCCCC ACCCAGGAGC AGGGTGGTGG   720
65       CTGGGGCGAT GGTGGACGCC CTGAAGATGT CCCATGGCTA CTGAAGGGGC TGCCCAGTTA   780
         GGGAACAGAG TGGCGGGCAT GGTGTGTAGC CTATGGGTGC TGCTCCTGGT GTCTTCAGTT   840
         CTGGCTCTGG AAGAGGTATT GCTGGACACC ACGGAGAGA CATCTCGAGAT TGGCTGGCTC   900
         ACCTACCCAC CAGGGGGGTG GGACGAGGTG AGTGTTCTGG ACGACCAGCG ACGCCTGACT   960
70       CGGACCTTTG AGGCATGTCA TGTGGCAGGG GCCCCTCCAG GGACAATTGG              1020
         TTGCAGACAC ACTTTGTGGA GCGGCGCGGG GCCCAGAGGG CGCACATTCG ACTCCACTTC   1080
         TCTGTGCGGG CATGCTCCAG CCTGGGTGTG AGCGGCGGCA CCTGCCGGGA GACCTTCACC   1140
         CTTTACTACC GTCAGGCTGA GGAGCCCGAC AGCCCTGACC GCGTTTCCTC CTGGCACCTC   1200
         AAACGCTGGA CCAAGGTGGA CACAATTGCA GCAGACGAGA GCTTTCCCTC CTCCTCCTCC   1260
         TCCTCCTCCT CTTCTTCCTC TGCAGCGTGG GCTGTGGGAC CCCACGGGGC TGGGCAGCGG   1320
75       GCTGGACTGC AAACTGAACGT CAAAGAGCGG AGCTTTGGGC CTCTCACCCA ACGCGGCTTC   1380
         TACGTGGCCT TCCAGGACAC GGGGGCCTGC CTGGCCCTGG TCGCTGTCAG GCTCTTCTCC   1440
         TACACCTGCC CTGCCGTGCT CCGATCCTTT GCTTCCTTTC CAGAGACGCA GGCCAGTGGG   1500
         GCTGGGGGGG CCTCCCTGGT GGCAGCTGTG GGCACCTGTG TGGCTCATGC AGAGCCAGAG   1560
         GAGGATGGAG TAGGGGGCCA GGCAGGAGGC AGCCCCCCCA GGCTGCACTG CAACGGGGAG   1620
80       GGCAAGTGGA TGGTAGCTGT CGGGGGCTGC CGCTGCCAGC CTGGATACCA ACCAGCACGA   1680
         GGAGACAAGG CCTGCCAAGC CTGCCCACGG GGGCTCTATA AGTCTTCTGC TGGGAATGCT   1740
         CCCTGCTCAC CATGCCCTGC CCGCAGTCAC GCTCCCAACC CAGCAGCCCC CGTTTGCCCT   1800
         TGCCTGGAGG GCTTCTACCG GGCCAGTTCC GACCCACCAG AGGCCCCCTG CACTGGTCCT   1860
         CCATCGGCTC CCCAGGAGCT TTGGTTTGAG GTGCAAGGCT CAGCACTCAT GCTACACTGG   1920
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CGCCTGCCTC GGGAGCTGGG GGGTCGAGGG GACCTGCTCT TCAATGTCGT GTGCAAGGAG   1980
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GAGGTCCACT TCGACCCTCG CCAGAGAGGC CTGACTGAGA GCCGAGTGTT AGTGGGGGGA   2100
CTCCGGGCAC ACGTACCCTA CATCTTAGAG GTGCAGGCTG TTAATGGGGT GTCTGAGCTC   2160
AGCCCTGACC CTCCTCAGGC TGCAGCCATC AATGTCAGCA CCAGCCATGA AGTGCCCTCT   2220
GCTGTCCCTG TGGTGCACCA GGTGAGCCGG GCATCCAACA GCATCACGGT GTCCTGGCCG   2280
CAGCCCGACC AGACCAATGG GAACATCCTG GACTATCAGC TCCGCTACTA TGACCAGGCA   2340
GAAGACGAAT CCCACTCCTT CACCCTGACC AGCGAGACCA ACACTGCCAC CGTGACACAG   2400
CTGAGCCCTG GCCACATCTA TGGTTTCCAG GTGCGGGCCC GGACTGCTGC CGGCCACGGC   2460
CCCTACGGGG GCAAAGTCTA TTTCCAGACA CTTCCTCAAG GGGAGCTGTC TTCCCAGCTT   2520
CCGGAAAGAC TCTCCTTGGT GATCGGCTCC ATCCTGGGGG CTTTGGCCTT CCTCCTGCTG   2580
GCAGCCATCA CCGTGCTGGC GGTCGTCTTC CAGCGGAAGC GGCGTGGGAC TGGCTACACG   2640
GAGCAGCTGC AGCAATACAG CAGCCCAGGA CTCGGGGTGA AGTATTACAT CGACCCCTCC   2700
ACCTACGAGG ACCCCTGTCA GGCCATCCGA GAACTTGCCC GGGAAGTCGA TCCTGCTTAT   2760
ATCAAGATTG AGGAGGTCAT TGGGACAGGC TCTTTTGGAG AAGTGCGCCA GGGCCGCCTG   2820
CAGCCACGGG GACGGAGGGA GCAGACTGTG GCCATCCAGG CCCTGTGGGC CGGGGGCGCGC   2880
GAAAGCCTGC AGATGACCTT CCTGGGCCGG GCCGCAGTGC TGGGTCAGTT CCAGCACCCC   2940
AACATCCTGC GGCTGGAGGG CGTGGTCACC AAGAGCCGAC CCCTCATGGT GCTGACGGAG   3000
TTCATGGAGC TTGGCCCCCT GGACAGCTTC CTCAGGCAGC GGGAGGGCCA GTTCAGCAGC   3060
CTGCAGCTGG TGGCCATGCA GCGGGGAGTG GCTGCTGCCA TGCAGTACCT GTCCAGCTTT   3120
GCCTTCGTCC ATCGCTCGCT GTCTGCCCAC AGCGTGCTGG TGAATAGCCA CTTGGTGTGT   3180
AAGGTGGCCC GTCTTGGCCA CAGTCCTCAG GGCCCAAGTT GTTTGCTTCG CTGGGCAGCC   3240
CCAGAGGTCA TTGCACATGG AAAGCATACA ACATCCAGTG ATGTCTGGAG CTTTGGGATA   3300
CTCATGTGGG AAGTGATGAG TTATGGAGAA CGGCCTTACT GGGACATGAG TGAGCAGGAG   3360
GTACTAAATG CAATAGAGCA GGAGTTCCGG CTGCCCCCGC CTCCCAGGCTG TCCTCCTGGA   3420
TTACATCTAC TTTATGTTGGA CACTTGGCAG AAGGACCGTG CCCGGCGGCC TCATTTTGAC   3480
CAGCTGGTGG CTGCATTTGA CAAGATGATC CGCAAGCCAG ATACCCTGCA GGCTGGCGGG   3540
GACCCAGGGG AAAGGCCTTC CCAGGCCCTT CTGACCCCTG TGGCCCTGGA CTTTCCTTGT   3600
CTGGACTCAC CCCAGGCCTG GCTTTCAGCC ATTGGACTGG AGTGCTACCA GGACAACTTC   3660
TCCAAGTTTG GCCTCTGTAC CTTCAGTGAT GTGGCTCAGC TCAGCCTAGA AGACCTGCCT   3720
GCCCTGGGCA TCACCCTGGC TGGCCACCAG AAGAAGCTGC TGCCACCACAT CCAGCTCCTT   3780
CAGCAACACC TGAGGCAGCA GGGCTCAGTG GAGGTCTGAG AATGACGATA CCCGTGACTC   3840
AGCCCTGGAC ACTGGTCCGA GAAGGGACAT GTGGGACGTG AGCCGGGCTC CAACAGCCTC   3900
TGTGAGAGAT GCCCCACACC AAACCCAACC CTCCCGATGG CTGCATTCCC TGGTCCTCCG   3960
CCTCTCCACC AGCCCCCTCC TCATTAAAGG GAAAGAAGGG AATTTGCAAA         4010
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Seq ID NO: C213 DNA Sequence
Nucleic Acid Accession #: XM_043340.4
Coding sequence: 195..1067

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GTGGCGAGTG GCGAGTGTCA GGGGGGCGGC CGGCGGGGGC CGGCGGCCG GAGGAGGCGT   120
TGGCAGCGGG CTCGGACCCA CGCGGCGCGG CGGCCGCCT GGCCTGCAGC GCTCCCACCC   180
CCGGCGGCGG CACGATGCCC TTTGACTTCA GGAGGTTTGA CATCTACAGG AAGGTGCCCA   240
AGGACCTTAC GCAGCCAACG TACACCGGGG CCATTATCTC CATCTGCTGC TGCCTCTTCA   300
TCCTCTTCCT CTTCCTCTCG GAGCTCACCG GATTTATAAC GACAGAAGTT GTGAACGAGC   360
TCTATGTCGA TGACCCAGAC AAGGACAGCG GTGGCAAGAT CGACGTCAGT CTGAACATCA   420
GTTTACCCAA TCTGCACTGC GAGTTGGTTG GGCTTGACAT TCAGGATGAG ATGGGCAGGC   480
ACGAAGTGGG CCACATCGAC AACTCCATGA AGATCCCGCT GAACAATGGG GCAGGCTGCC   540
GCTTCGAGGG GCAGTTCAGC ATCAACAAGG TCCCCGGCAA CTTCCACGTG TCCACACACA   600
GTGCCACAGC CCAGCCACAG AACCCAGACA TGACGCATGT CATCCACAAG CTCTCACTTTG   660
GGGACACGCT ACAGGTCCAG AACATCCACG GAGCTTTCAA TGCTCTCGGG GGAGCAGACA   720
GACTCACCTC CAACCCCCTG GCCTCCCACG ACTACATCCT GAAGATTGTG CCCACCGGTTT   780
ATGAGGACAA GAGTGGCAAG CAGCGGTACT CCTACCAGTA CACGGTGGCC AACAAGGAAT   840
ACGTCGCCTA CAGCCACACG GGCCGCATCA TCCCTGCAAT CTGGTTCCGC TACGACCTCA   900
GCCCCATCAC GGTCAAGTAC ACAGAGAGAC GGCAGCCGCT GTACAGATTC ATCACCACGA   960
TCTGTGCCAT CATTGGCGGG ACCTTCACCG TCGCCGGCAT CCTGGACTCA TGCATCTTCA   1020
CAGCCTCTGA GGCCTGGAAG AAGATCCAGC TGGGCAAGAT GCATTGACGC CACACCCAGC   1080
CTAATGGCCG AGGACCCTGG GCATCGCCAG CCTTGCCTCC AGTGCCCTGT CTCCTTTGGC   1140
CCTCAATCTG GTCCCAAATC TGGCTGTGTC CCAAAGGGTG TGTGGGAAGT GGGGGGGAAAG   1200
TAGAGGATGG CTCGATGTTT TGCAGCTACC TCTTTTCCCC GTGTTTCTTT TTAGACAAAT   1260
TACACTGCCT GAAGTTGCAG TTCCCCTTTC CCTGGGGAGC CCCAAGAACA GAGTCAGGCA   1320
AGGGGTGGGG AGTCCAGGGG AACATCCCAG AATGCATATC GATCAGCTCT CAGCCAGGCT   1380
TCGACAATCT CGCAGCCCCC ACTAGGTGGA CACATTAATG ATTTGGTTTC TCCCCTGGGC   1440
AGCCAACCTG CCCCAGAGGC ACCAGACCTG GGCTTTCAGC TTTGGGACCA GGCTGCCCAA   1500
AGGTACTCCT TTATACACCC GGCACCTTCC ACGAAAGATG GTACTTCCCA AGCAAGCCCC   1560
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CATTTTTTTG AAGAAAAAAA AAAAACAAC TCTGAGGACA TAGGGGATGT CAGTTTCCTA   1680
TGGAAGAGAC ACCTCTGACC CGTTATTCTT ATAATCAAAA TCTGAAGGGA AAAAATGTT   1740
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Seq ID NO: C214 DNA Sequence
Nucleic Acid Accession #: NM_002151.1
Coding sequence: 246..1499

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TGCCCAGGCC TGGAGACTGA CCCGACCCCG GCACTACCTC GAGGCTCCGC CCCCACCTGC   180
TGGACCCCAG GGTCCCACCC TGGCCCAGGA GGTCAGCCAG GGAATCATTA ACAAGAGGCA   240
GTGACATGGC GCAGAAGGAG GGTGGCCGGA CTGTGCCATG CTGCTCCAGA CCCAAGGTGG   300
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CAGCTCTCAC TGCGGGGACC CTGCTACTTC TGACAGCCAT CGGGGCGGCA TCCTGGGCCA      360
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CGGACGCTCG GCTCATGGTC TTTGACAAGA CGGAAGGGAC GTGGCGGCTG CTGTGCTCCT      480
CGCGCTCCAA CGCCAGGGTA GCCGGACTCA GCTGCGAGGA GATGGGCTTC CTCAGGGCAC      540
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GTGTGGACGA GGGGAGGCTG CCCCACACCC AGAGGCTGCT GGAGGTCATC TCCGTGTGTG      660
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CCGTGGACCG CATCGTGGGA GGCCGGGACA CCAGCTTGGG CCGGTGGCCG TGGCAAGTCA      780
GCCTTCGCTA TGATGGAGCA CACCTCTGTG GGGGATCCCT GCTCTCCGGG GACTGGGTGC      840
TGACAGCCGC CCACTGCTTC CCGGAGCGGA ACCGGGTCCT GTCCCGATGG CGAGTGTTTG      900
CCGGTGCCGT GGCCCAGGCC TCTCCCCACG GTCTGCAGCT GGGGGTGCAG GCTGTGGTCT      960
ACCACGGGGG CTATCTTCCC TTTCGGGACC CCAACAGCGA GGAGAACAGC AACGATATTG     1020
CCCTGGTCCA CCTCTCCAGT CCCCTGCCCC TCACAGAATA CATCCAGCCT GTGTGCCTCC     1080
CAGCTGCCGG CCAGGCCCTG GTGGATGGCA AGATCTGTAC CGTGACGGGC TGGGGCAACA     1140
CGCAGTACTA TGGCCAACAG GCCGGGGTAC TCCAGGAGGC TCGAGTCCCC ATAATCAGCA     1200
ATGATGTCTG CAATGGCGCT GACTTCTATG GAAACCAGAT CAAGCCCAAG ATGTTCTGTG     1260
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GTGAGGACAG CATCTCTCGG ACGCCACGTT GGCGGCTGTG TGGCATTGTG AGTTGGGGCA     1380
CTGGCTGTGC CCTGGCCCAG AAGCCAGGCG TCTACACCAA AGTCAGTGAC TTCCGGGAGT     1440
GGATCTTCCA GGCCATAAAG ACTCACTCCG AAGCCAGCGG CATGGTGACC CAGCTCTGAC     1500
CGGTGGCTTC TCGCTGCGCA GCCTCCAGGG CCCGAGGTGA TCCCGGTGGT GGGGATCCACG     1560
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CCCTCCAGGG TCCTCTCTTC CACAGTGGCG GGCCCACTCA GCCCCGAGAC CACCCAACCT     1680
CACCCTCCTG ACCCCCATGT AAATATTGTT CTGCTGTCTG GGACTCCTGT CTAGGTGCCC     1740
CTGATGATGG GATGCTCTTT AAATAATAAA GATGGTTTTG ATT                        1783
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Seq ID NO: C215 DNA Sequence
Nucleic Acid Accession #: AB037745.1
Coding sequence: 26..1744
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CTCAGACAAT GACTTCATGA TTCTCACTCT GGTTGTGCCA GGATTTAGAC CTCCGCAGTC    180
GGTGATGGCA GACACAGAGA ATAAAGAGGT GGCCAGAATC ACATTTGTCT TTGAGACCCT    240
CTGTTCTGTG AACTGTGAGC TCTACTTCAT GGTGGGTGTG AATTCTAGGA CCAACACTCC    300
TGTGGAGACG TGGAAAGGTT CCAAAGGCAA ACAGTCCTAT ACCTACATCA TTGAGGAGAA    360
CACTACCACG AGCTTCACCT GGGCCTTCCA GAGGACCACT TTTCATGAGG CAAGCAGGAA    420
GTACACCAAT GACGTTGCCA AGATCTACTC CATCAATGTC ACCAATGTTA TGAATGGCGT    480
GGCCTCCTAC TGCCGTCCCT GTGCCCTAGA AGCCTCTGAT GTGGGCTCCT CCTGCACCTC    540
TTGTCCTGCT GGTTACTATA TTGACCGAGA TTCAGGAACC TGCCACTCCT GCCCCCCTAA    600
CACAATTCTG AAAGCCCACC AGCCTTATGG TGTCCAGGCC TGTGTGCCCT GTGGTCCAGG    660
GACCAAGAAC AACAAGATCC ACTCTCTGTG CTACAATGAT TGCACCTTCT CACGCAACAC    720
TCCAACCAGG ACTTTCAACT ACAACTTCTC CGCTTTGGCA AACACCGTCA CTCTTGCTGG    780
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TTTCCACCTG GAGTCCTTGG GAATACCGGA CGTGATCTTC TTTTATAGGT CCAATGATGT   1140
GACCCAGTCC TGCAGTTCTG GGAGATCAAC CACCATCCGC GTCAGGTGCA GTCCACAGAA   1200
AACTGTCCCT GGAAGTTTGC TGCTGCCAGG AACGTGCTCA GATGGGACCT GTGATGGCTG   1260
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CATAGATTTC TGGCTGAAAG TGGGCATCTC TGCAGGCACC TGTACTGCCA TCCTGCTCAC   1500
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GATCAAATCA TTTACCTCCA AGCAGCCAGC TCCTGTCACC ATCTCTCTTT CAGAGGACTC   1740
CTGATGGATT TGACTCAGTG CCGCTGAAGA CATCCTCAGG AGGCCCAGAC ATGGACCTGT   1800
GAGAGGCACT GCCTGCCTCA CCTGCCTCCT CACCTTGCAT AGCACCTTTG CAAGCCTGCG   1860
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CCTCAAACCT GCCAAATATA CCCACACTTT GTTTGTAAAT TATGCCCTTG CTTGTATCTT   2040
GTTTCCCAAA ATGGCCCATC CGCCAGAGCC ATAGCTTCGT CTGCTCATAA TTCTTATAGC   2100
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GATCCATTTC CCCTGGATAA CCAGCTCAAA GGGAGTGAAA ATGGTAGTCT GAGGGCAAGG   2340
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CACTCAGCCT TTTATTTGTT TTTTAAACCA CGTAGCTCAT TGCCTTCTCT TAAGTAAATG   3060
ATAGATATTC TCACTGAAGC CAAAGGAATA AGTTCATCAA GAAAATGCCC AAAGCCCTGG   3120
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GTTTGGGCCA TATTATGGAA CAGGGGTCTC TTATTTGAAA AGAGCACAAG GAGGCCAAGA      3360
TTTTAATGGG GCACTTTAGG GGATACAGCC CACAATGGCA TGGGCCTGAG GTGGCCGTGA      3420
TGTCTGCTTC TAAGCTTAAC GCATCTGCTC AGGCACAGAA TAAACGTCTA GGCTGGCCAA      3480
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TGAGACCCTG TCTCTAAAAA ATTTAAAAAT AAACAAGGTG TTCACCAAGC TGGGATACTT      3720
CTCACTATTA AGCCCCTATC TTTCTCTTTT TTTCATTCTC AATTGCTTTG TGTGATAAAA      3780
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CAGTTCTGCC TCCATCACTA TCAGGCTAGG GTGACCTTCC CTTGGTCAAG CCCCAATTGC      4020
CCATGATTTG TGCCTGTGCC CTTTCTCCAG TGACCATTTG GTGACCAGAT GGTAGATATA      4080
GAAAGGGGAT GGCATTTGCA AGTGACTAGT CTGCCACAAA ATGCTCATCT GATTAGCCAC      4140
TGCTGCCCTG GCAATGGCTT TGTAAGAGTC AATGAGAACT AGAGCCAGGC TGTGGTCCCT      4200
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ACAGCTTTAT TGAGATATAA TTCACATATT ATACAATTCA CCTTTAAAAC ATACGATTCA      4740
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CCATGATCTT GGCTCACTGC AGCCTCCCCA TCCTGGGTTC AAGTGATCCT TCTGCTTCAG      4920
CCTCCCCAGT AGCTGGGATT ACAGGCATGC GCCACCACGC CTAGCTAATT TTTGTGTTTT      4980
TAGTAGAGAT GGGGTTTCAC CGTGTTGGCC AGGCTGGTCT CAAACTCCTG GACTCAAGTG      5040
ATCCACCCAC CTCGGCCTCC CAAAGTGCTG GGATTGCAGG TGTGAGCCAC CGTGCCTGGC      5100
CTACGTGTTC AATTTTCTAT GAACAAAGGC TTTAGTCCTT GACCCAGGGC TAAAGTGGTC      5160
TGTCCAAGCT GTTGTTGGTA GAGGGAGTAT GATAAAATGT TTAAATCTCA TTTGGTTACC      5220
TTGAGTCCTG GAACACGCAG TAACTGTCAT GCTATAGTCA TCATCTGTAT TTGGCTGGGA      5280
ATACAAATGA AGATTGTGGT GTATTCAAGC AGTAGGGTTT TTGCTTTTGT TTTTGTTTTA      5340
GTGCCAACAA AACTTTTTTT TGTCTGACTA CATTAAAGAT AAGACTGACT ATATTTATAC      5400
AACAGAAACT TTGTAATAGA TTTTTTCAGC TTTGTGAAAT CGAATTTTTT TTCATCAGGG      5460
CTGGTTGGAT TTCCTTTTTA CCCTGTAATC CAAGCGTTAA TAGTTTGTTA GAAGATGGGT      5520
TATTGCATGT CACTTTTTTT TTTTTGTAAA ATAAAAACAT ACCTTAC                   5567
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Seq ID NO: C216 DNA Sequence
Nucleic Acid Accession #: NM_004864.1
Coding sequence: 26-952

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TCAGATGCTC CTGGTGTTGC TGGTGCTCTC GTGGCTGCCG CATGGGGGCG CCCTGTCTCT     120
GGCCGAGGCG AGCGCGCGCAA GTTTCCCGGG ACCCTCAGAG TTGCACTCCG AAGACTCCAG     180
ATTCCGAGAG TTGCGGGAAAC GCTACGAGGA CCTGCTAACC AGGCTGCGGG CCAACCAGAG     240
CTGGGAAGAT TCGAACACCG ACCTCGTCCC GGCCCCTGCA GTCCGGATAC TCACGCCAGA     300
AGTGCGGCTG GGATCCGGCG GCCACCTGCA CCTGCGTATC TCTCGGGCCG CCCTTCCCGA     360
GGGGCTCCCC GAGGCCTCCC GCCTTCACCG GGCTCTGTTC CGGCTGTCCC CGACGGCGTC     420
AAGGTCGTGG GACGTGACAC GACCGCTGCG GCGTCAGCTC AGCCTTGCAA GACCCCAAGC     480
GCCCGCGCTG CACCTGCGAC TGTCGCCGCC GCCGTCGCAG TCGGACCAAC TGCTGGCAGA     540
ATCTTCGTCC GCACGGCCCC AGCTGGAGTT GCACTTGCGG CCGCAAGCCG CCAGGGGGCG     600
CCGCAGAGCG CGTGCGCGCA ACGGGGACGA CTGTCCGCTC GGGCCCGGGC GTTGCTGCCG     660
TCTGCACACG GTCCGCGCGT CGCTGGAAGA CCTGGGCTGG GCCGATTGGG TGCTGTCGCC     720
ACGGGAGGTG CAAGTGACCA TGTGCATCGG CGCGTGCCCG AGCCAGTTCC GGGCGGCAAA     780
CATGCACGCG CAGATCAAGA CGAGCCTGCA CCGGCTGAAG CCCGACACGG AGCCAGCGCC     840
CTGCTGCGTG CCCGCCAGCT ACAATCCCAT GGTGCTCATT CAAAAGACCG ACACCGGGGT     900
GTCGCTCCAG ACCTATGATG ACTTGTTAGC CAAAGACTGC CACTGCATAT GAGCAGTCCT     960
GGTCCTTCCA CTGTGCACCT GCGCGGGGGA GGGCGACCTCA GTTGTCCTGC CCTGTGGAAT    1020
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TTATTTATTA TTAATTTATT GGGGTGACCT TCTTGGGGAC TCGGGGGCTG GTCTGATGGA    1140
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Seq ID NO: C432 DNA Sequence
Nucleic Acid Accession #: NM_052858.1
Coding sequence: 54..1259

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CCCACCCAGA CCAAGGCCGC ACCCACGATC GACCGCGGGA CCGACCCGGG GACCCGCGCA     180
GGAAGCGAAG CAGCGCACGGG AACCGGCGAA GGGACGGGGA CCGGGACCCG AAGAGAGACC     240
AGGAGAGGGA CGGGAACCGC GACCGGAACC GGGACCGGGA GAGGGAGAGA GAGAGGGAAA     300
GAGACCCGGA CCGAGGCCCC CGCCGGGGACA CACACAGGGA CGCGGGCCCT CGCGCAGGTG     360
AACACGGAGT TTGGGAAAAA CCGCGCCAAA GCCGGACGCG GGACGGAGCC CGGGGACTGA     420
CCTGGGACGC AGCCGCGCCT CCTGGGCCCG CGCCCTGGGA AGCCCCGGAG CCGCCGCAGC     480
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     CGCAGAGGAA GGGAGACCCC GGGCGCCGCA GACCCGAAAG TGAACCCCCT TCGGAGAGAT    540
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 5   AAGGACTCCT GGAATGCCAC AAATGCCAAT ACTTGTGCAC TGGGAGAGCC TGCTGCCAAA    660
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     CAGGGGGCTA CACGGGCATC ACCAGCTTGG GGGGCATTTA CTACTATCAG TTCGGAGGGG    780
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     ACCAGCTAAA GCTGCCCATG GTCACTGTGG CAATGGCCTG TAGTGGAGCC CTCACAGCCC    900
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10   TGGTGACCGA AGGCTTGTTG GACATGCTCA TCGCGGGGGG GTACATCCCG GCCTTGTACT   1020
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     TGTACCAAAG CAAAGGCTAC AGCGGTTTCG GCTGCAGTTT CCACGGAGCA GATATAGGAG   1140
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     AGGGCTACCG AAAAGTTAGG AAGCTAAAAG AGAAGCCAGC AGAAATGTTT GAATTTTAAG   1260
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15   TTCCAAGAA TCCCTTGTTG TGGAAGTTTC CAATGCTGGA AAAGCAGCGA GCCAGCGTTG   1380
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     CTTCTGGAGT CCTCTGTGAG TGAGGGACCA ATCAAAATTA TTTTTCAAAA AGCAAAAAAA   1500
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20   ATCACTTGAG GTCAGGAGCT CGAGACCAGC TTGGCCAACA TGGTGAGCCC CCGTCTCTAC   1620
     TAAAATACAA AAAAATTAGC CAGGCGTGGT GGCGGGCGCC TGTAATCCCA GCTACTTGGG   1680
     AGGCTGAGGC AGGAGAATCG CTTGAATCTG GGAGGCGGAG ATTGCAGTGA GCCGAGATCC   1740
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Seq ID NO: C434 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 261..2861

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     CGGCGCGGGG AGCCAGCGGG GCTGAGCGCG GCCAGGGTCT GAACCCAGAT TTCCCAGACT    120
     AGCTACCACT CCGCTTGCCC ACGCCCCGGG AGCTCGCGGC GCCTGGCGGT CAGCGACCAG    180
     ACGTCCGGGG CCGCTGCGCT CCTGGCCCGC GAGGCGTGAC ACTGTCTCGG CTACAGACCC    240
     AGAGGGAGCA CACTGCCAGG ATGGGAGCTG CTGGGAGGCA GGACTTCCTC TTCAAGGCCA    300
     TGCTGACCAT CAGCTGGCTC ACTCTGACCT GCTTCCCTGG GGCCACATCC ACAGTGGCTG    360
     CTGGGTGCCC TGACCAGAGC CCTGAGTTGC AACCCTGGAA CCCTGGCCAT GACCAAGACC    420
     ACCATGTGCA TATCGGCCAG GGCAAGACAC TGCTGCTCAC CTCTTCTGCC ACGGTCTATT    480
     CCATCCACAT CTCAGAGGGA GGCAAGCTGG TCATTAAAGA CCACGACGAG CCGATTGTTT    540
     TGCGAACCCG GCACATCCTG ATTGACAACG GAGGAGAGCT GCATGCTGGG AGTGCCCTCT    600
     GCCCTTTCCA GGGCAATTTC ACCATCATTT TGTATGGAAG GGCTGATGAA GGTATTCAGC    660
     CGGATCCTTA CTATGGTCTG AAGTACATTG GGGTTGGTAA AGGAGGCGCT CTTGAGTTGC    720
     ATGGACAGAA AAAGCTCTCC TGGACATTTC TGAACAAGAC CCTTCACCCA GGTGGCATGG    780
     CAGAAGGAGG CTATTTTTTT GAAAGGAGCT GGGGCCACCG TGGAGTTATT GTTCATGTCA    840
     TCGACCCCAA ATCAGGCACA GTCATCCATT CTGACCGGTT TGACACCTAT AGATCCAAGA    900
     AAGAGAGTGA ACGTCTGGTC CAGTATTTGA ACGCGGTGCC CGATGGCAGG ATCCTTTCTG    960
     TTGCAGTGAA TGATGAAGGT TCTCGAAATC TGGATGACAT GGCCAGGAAG GCGATGACCA   1020
     AATTGGGAAG CAAACACTTC CTGCACCTTG GATTTAGACA CCCTTGGAGT TTTCTAACTG   1080
     TGAAAGGAAA TCCATCATCT TCAGTGGAAG ACCATATTGA ATATCATGGA CATCGAGGCT   1140
     CTGCTGCTGC CCGGGTATTC AAATTGTTCC AGACAGAGCA TGGCGAATAT TTCAATGTTT   1200
     CTTTGTCCAG TGAGTGGGTT CAAGACGTGG AGTGGACGGA GTGGTTCGAT CATGATAAAG   1260
     TATCTCAGAC TAAAGGTGGG GAGAAAAATTT CAGACCTCTG GAAAGCTCAC CCAGGAAAAA   1320
     TATGCAATCG TCCCATTGAT ATACAGGCCA CTACAATGGA TGGAGTTAAC CTCAGCACCG   1380
     AGGTTGTCTA CAAAAAAGGC CAGGATTATA GGTTTGCTTG CTACGACCGG GGCAGAGCCT   1440
     GCCGGAGCTA CCGTGTACGG TTCCTCTGTG GGAAGCCTGT GAGGCCCAAA CTCACAGTCA   1500
     CCATTGACAC CAATGTGAAC AGCACCATTG TGAACTTGGA GGATAATGTA CAGTCATGGA   1560
     AACCTGGAGA TACCCTGGTC ATTGCCAGTA CTGATTACTC CATGTGACCAG GCAGAAGAGT   1620
     TCCAGGTGCT TCCCTGCAGA TCCTGCGCCC CCAACCAGGT CAAAGTGGCA GGGAAACCAA   1680
     TGTACCTGCA CATCGGGGAG GAGATAGACG GCGTGGACAT GCGGGCGGAG GTTGGGCTTC   1740
     TGAGCCGGAA CATCATAGTG ATGGGGGAGA TGGAGGACAA ATGCTACCCC TACAGAAACC   1800
     ACATCTGCAA TTTCTTTGAC TTCGATACCT TTGGGGGCCA CATCAAGTTT GCTCTGGAGT   1860
     TTAAGGCAGC ACACTTGGAG GGCACGGAGC TGAAGCATAT GGGACAGCAG CTGGTGGGTC   1920
     AGTACCCGAT TCACTTCCAC CTGGCCGGTG ATGTAGACGA AAGGGGAGGT TATGACCCAC   1980
     CCACATACAT CAGGGACCTC TCCATCCATC ATACATTCTC TCGCTGCGTC ACAGTCCATG   2040
     GCTCCAATGG CTTGTTGATC AAGGACGTTG TGGGCTATAA CTCTCTTTGGGC CACTGCTTCT   2100
     TCACGGAAGA TGGGCCGGAG GAACGCAACA CTTTTGACCA CTGTCTTGGC CTCCTTGTCA   2160
     AGTCTGGAAC CCTCCTCCCC TCGGACCGTG ACAGCAAGAT GTGCAAGATG ATCACAGAGG   2220
     ACTCCTACCC AGGGTACATC CCCAAGCCCA GGCAAGACTG CAATGCTGTG TCCACCTTCT   2280
     GGATGGCCAA TCCCAACAAC AACCTCATCA ACTGTGCCGC TGCAGGATCT GAGGAAACTG   2340
     GATTTTGGTT TATTTTTCAG CACGTACCAA CGGGCCCCTC CGTGGGAATG TCCAACTACC   2400
     GTTATTCAGA GCACATTCCA CTGGGAAAAT TCTATAACAA CCGAGCACAT TCCAACTACC   2460
     GGGCTGGCAT GATCATAGAC AACGGAGTCA AAACCACCGA GGCCTCTGCC AAGGACAAGC   2520
     GGCCGTTCCT CTCAATCATC TCTGCCAGAT ACAGCCCTCA CCAGGACGCC CCAGCGCTGA   2580
     AGCCCCGGGA GCCGGCCATC ATCAGACACT TCATTGCCTA CAAGAACCAG GACCACGGGG   2640
     CCTGGCTGCG CGGCGGGGAT GTGTGGCTGG ACAGCTGCCA TTTCAGAGGG GAGGCTCAGG   2700
     AAGGCTTCTT GCTTACAGGA ATGAAGGCTG GGGGCATTTT GCTGGGGGGA GATGAGGCAG   2760
     CCTCTGGAAT GGCTCAGGGA TTCAGCCCTC CCTGCCGCTG CCTGCTGAAG CTGGTGACTA   2820
     CGGGGTCGCC CTTTGCTCAC GTCTCTCTGG CCCACTCATG ATGGAGAAGT GTGGTCAGAG   2880
     GGGAGCAATG GGCTTTGCTG CTTATGAGCA CAGAGGAATT CAGTCCCCAG GCAGCCCTGC   2940
     CTCTGACTCC AAGAGGGTGA AGTCCACAGA AGTGAGCTCC TGCCTTAGGG CCTCATTTGC   3000
     TCTTCATCCA GGGAACTGAG CACAGGGGGC CTCCAGGAGA CCCTAGATGT GCTCGTACTC   3060
     CCTCGGCCTG GGATTTCAGA GCTGGAAATA TAGAAAATAT CTAGCCCAAA GCCTTCATTT   3120
     TAACAGATGG GGAAAGTGAA CCCCCAAGAT GGGAAAGAAC ACCAGCTA AGGGAGGGCC   3180
     TGGGGAGCCC CACCCTAGCC CTTGCTGCCA CACCACATTG CCTCAACAAC CGGCCCCAGA   3240
     GTGCCCAGGC ACTCCTGAGG TAGCTTCTGG AAATGGGGAC AAGTCCCCTC GAAGGAAAGG   3300
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1335

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AAATGACTAG AGTAGAATGA CAGCTAGCAG ATCTCTTCCC TCCTGCTCCC AGCGCACACA   3360
AACCCGCCCT CCCCTTGGTG TTGGCGGTCC CTGTGGCCTT CACTTTGTTC ACTACCTGTC   3420
AGCCCAGCCT GGGTGCACAG TAGCTGCAAC TCCCCATTGG TGCTACCTGG CTCTCCTGTC   3480
TCTGCAGCTC TACAGGTGAG GCCCAGCAGA GGGAGTAGGG CTCGCCATGT TTCTGGTGAG   3540
CCAATTGGC TGATCTTGGG TGTCTGAACA GCTATTGGGT CCACCCCAGT CCCTTTCAGC   3600
TGCTGCTTAA TGCCCTGCTC TCTCCCTGGC CCACCTTATA GAGAGCCCAA AGAGCTCCTG   3660
TAAGAGGGAG AACTCTATCT GTGGTTTATA ATCTTGCACG AGGCACCAGA GTCTCCCTGG   3720
GTCTTGTGAT GAACTACATT TATCCCCTTT CCTGCCCCAA CCACAAACTC TTTCCTTCAA   3780
AGAGGGCCTG CCTGGCTCCC TCCACCCAAC TGCACCCATG AGACTCGGTC CAAGAGTCCA   3840
TTCCCCAGGT GGGAGCCAAC TGTCAGGGAG GTCTTTCCCA CCAAACATCT TTCAGCTGCT   3900
GGGAGGTGAC CATAGGGCTC TGCTTTTAAA GATATGGCTG CTTCAAAGGC CAGAGTCACA   3960
GGAAGGACTT CTTCCAGGGA GATTAGTGGT GATGGAGAGG AGAGTTAAAA TGACCTCATG   4020
TCCTTCTTGT CCACGGTTTT GTTGAGTTTT CACTCTTCTA ATGCAAGGGT CTCACACTGT   4080
GAACCACTTA GGATGTGATC ACTTTCAGGT GGCCAGGAAT GTTGAATGTC TTTGGCTCAG   4140
TTCATTTAAA AAAGATATCT ATTTGAAAGT TCTCAGAGTT GTACATATGT TTCACAGTAC   4200
AGGATCTGTA CATAAAAGTT TCTTTCCTAA ACCATTCACC AAGAGCCAAT ATCTAGGCAT   4260
TTTCTTGGTA GCACAAATTT TCTTATTGCT TAGAAAAATTG TCCTCCTTGT TATTTCTGTT   4320
TGTAAGACTT AAGTGAGTTA GGTCTTTAAG GAAAGCAACG CTCCTCTGAA ATGCTTGTCT   4380
TTTTTCTGTT GCCGAAATAG CTGGTCCTTT TTCGGGAGTT AGATGTATAG AGTGTTTGTA   4440
TGTAAACATT TCTTGTAGGC ATCACCATGA ACAAAGTATAT ATTTTCTATT TATTTATTAT   4500
ATGTCCACTT CAAGAAGTCA CTGTCAGAGA AATAAAGAAT TGTCTTAAAT GTCATGATTG   4560
GAGATGTCCT TTGCATTGCT TGGAAGGGGT GTACCTAGAG CCAAGGAAAT TGGCTCTGGT   4620
TTGGAAAAT TTTGCTGTTA TTATAGTAAA CATACAAAGG ATGTCAAAAA AAAAAAAAAA   4680
AAAAAAAAAA AAAAAAAAAA AA                                           4702
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Seq ID NO: C217 Protein Sequence
Protein Accession #: NP_005805.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MVGKMWPVLW TLCAVRVTVD AISVETPQDV LRASQGKSVT LPCTYHTSTS SREGLIQWDK   60
LLLTHTERVV IWPFSNKNYI HGELYKNRVS ISNNAEQSDA SITIDQLTMA DNGTYECSVS   120
LMSDLEGNTK SRVRLLVLVP PSKPECGIEG ETIIGNNIQL TCQSKEGSPT PQYSWKRYNI   180
LNQEQPLAQP ASGQPVSLKN ISTDTSGYYI CTSSNEEGTQ FCNITVAVRS PSMNVALYVG   240
IAVGVVAALI IIGIIIYCCC CRGKDDNTED KEDARPNREA YEEPPEQLRE LSRERBEEDD   300
YRQEEQRSTG RESPDHLDQ                                               319
```

Seq ID NO: C218 Protein Sequence
Protein Accession #: Eos sequence

```
1          11         21         31         41         51
|          |          |          |          |          |
MGSRTPESPL HAVQLRWGPR RRPPLLPLLL LLLPPPPRVG GFNLDAEAPA VLSGPPGSFF   60
GFSVEFYRPG TDGVSVLVGA PKANTSQPGV LQGGAVYLCP WGASPTQCTP IEFDSKGSRL   120
LESSLSSSEG EEPVEYKSLQ WFGATVRAHG SSILACAPLY SWRTEKEPLS DPVGTCYLST   180
DNPTRILEYA PCRSDPSWAA GQGYCQGGFS ABFTKTGRVV LGGPGSYFWQ GQILSATQEQ   240
IAESYYPEYL INLVQGQLQT RQASSIYDDS YLGYSVAVGE FSGDDTEDFV AGVPKGNLTY   300
GYVTILNGSD IRSLYNFSGE QMASYPGYAV AATDVNGDGL DDLLVGAPLL MDRTPDGRPQ   360
EVGRVYVYLQ HPAGIEPTPT LTLTGHDEFG RFGSSLTPLG DLDQDGYNDV AIGAPFGGET   420
QQGVVFVPPG GPGGLGSKPS QVLQPLWAAS HTPDPFGSAL RGGRDLDGNG YPDLIVGSPG   480
VDKAVVYRGR PIVSASASLT IPPAMFNPEB RSCELSGNPV ACINLSFCLN ASGKHVADSI   540
GFTVELQLDW QKQKGGVRRA LFLASRQATL TQTLLIQNGA REDCREMKIY LRNESEFRDK   600
LSPIHIALNF SLDPQAPVDS HGLRPALHYQ SKSRIEDKAQ ILLDCGEDNI CVPDLQLEVF   660
GEQNHVYLGD KNALNLTFHA QNVGEGGAYE AELRVTAPPE AEYSGLVRHP GNFSSLSCDY   720
FAVNQSRLLV CDLGNPMKAG ASLWGGLRFT VPHLRDTKKT IQFDFQILSK NLNNSQSDVV   780
SFRLSVEAQA QVTLNGVSKP EAVLFPVSDW HPRDQPQKEE DLGPAVHHVY ELINQGPSSI   840
SQGVLELSCP QALEGQQLLY VTRVTGLNCT TNHPINPKGL ELDPEGSLHH QQKREAPSRS   900
SASSGPQILK CPEABCFRLR CELGPLHQQE SQSLQLHFRV WAKTFLQREH QPFSLQCEAV   960
YKALKMPYRI LPRQLPQKER QVATAVQWTK AEGSYGVPLW IIILAILFGL LLLGLLIYIL   1020
YKLGFFKRSL PYGTAMEKAQ LKPPATSDA                                    1049
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Seq ID NO: C219 Protein Sequence
Protein Accession #: NP_002412.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MHSFPPLLLL LFWGVVSHSF PATLETQEQD VDLVQKYLEK YYNLKNDGRQ VEKRRNSGPV   60
VEKLKQMQEF FGLKVTGKPD AETLKVMKQP RCGVPDVAQF VLTEGNPRWE QTHLTYRIEN   120
YTPDLPRADV DHAIEKAFQL WSNVTPLTPT KVSEGQADIM ISFVRGDHRD NSPFDGPGGN   180
LAHAFQPGPG IGGDAHFDED ERWTNNFREY NLHRVAAHEL GHSLGLSHST DIGALMYPSY   240
TFSGDVQLAQ DDIDGIQAIY GRSQNPVQPI GPQTPKACDS KLTFDAITTI RGEVMFFKDR   300
FYMRTNPFYP EVELNFISVF WPQLPNGLEA AYEFADRDEV RFPKGNKYWA VQGQNVLHGY   360
PKDIYSSFGF PRTVKHIDAA LSEENTGKTY FFVANKYWRY DEYKRSMDPG YPKMIAHDFP   420
GIGHKVDAVF MKDGFFYFFH GTRQYKFDPK TKRILTLQKA NSWFNCRKN              469
```

Seq ID NO: C220 Protein Sequence
Protein Accession #: Eos sequence

```
1          11         21         31         41         51
|          |          |          |          |          |
MHSFPPLLLL LFWGVVSHSF PATLETQEQD VDLVQKYLEK YYNLKNDGRQ VEKRRNSGPV   60
VEKLKQMQEF FGLKVTGKPD AETLKVMKQP RCGVPDVAQF VLTEGNPRWE QTHLTYRIEN   120
YTPDLPRADV DHAIEKAFQL WSNVTPLTPT KVSEGQADIM ISFVRGDHRD NSPFDGPGGN   180
LAHAFQPGPG IGGDAHFDED ERWTNNFREY NLHRVAAHAL GHSLGLSHST DIGALMYPSY   240
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TFSGDVQLAQ DDIDGIQAIY GRSQNPVQPI GPQTPKACDS KLTFDAITTI RGEVMFFKDR    300
FYMRTNPFYP EVELNFISVF WPQLPNGLEA AYEFADRDEV RFFKGNKYWA VQGQNVLHGY    360
PKDIYSSFGP PRTVKHIDAA LSEENTGKTY FFVANKYWRY DEYKRSMDPG YPKMIAHDFP    420
GIGHKVDAVF MKDGFFYFFH GTRQYKFDPK TKRILTLQKA NSWFNCRKN                469
```

Seq ID NO: C221 Protein Sequence
Protein Accession #: NP_055146.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MVRKPVVSTI SKGGYLQGNV NGRLPSLGNK EPPGQEKVQL KRKVTLLRGV SIIIGTIIGA    60
GIFISPKGVL QNTGSVGMSL TIWTVCGVLS LFGALSYAEL GTTIKKSGGH YTYILEVFGP   120
LPAFVRVWVE LLIIRPAATA VISLAFGRYI LEPFFIQCEI PELAIKLITA VGITVVMVLN   180
SMSVSWSARI QIPLTFCKLT AILIIIVPGV MQLIKGQTQN PKDAFSGRDS SITRLPLAFY   240
YGMYAYAGWF YLNFVTEEVE NPEKTIPLAI CISMAITIGV YVLTNVAYFT TINAEELLLS   300
NAVAVTFSER LLGNFSLAVP IPVALSCFGS MNGGVFAVSR LFYVASREGH LPEILSMIHV   360
RKHTPLPAVI VLHPLTMIML FSGDLDSLLN FLSFARWLFI GLAVAGLIYL RYKCPDMHRP   420
FKVPLFIPAL FSFTCLFMVA LSLYSDPFST GIGFVITLTG VPAYYLFIIW DKKPRWFRIM   480
SEKITRTLQI ILEVVPEEDK L                                            501
```

Seq ID NO: C222 Protein Sequence
Protein Accession #: NP_003237.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MGLAWGLGVL FLMHVCGTNR IPESGGDNSV FDIFELTGAA RKGSGRRLVK GPDPSSPAFR    60
IEDANLIPPV PDDKFQDLVD AVRAEKGFLL LASLRQMKKT RGTLLALERK DHSGQVFSVV   120
SNGKAGTLDL SLTVQGKQHV VSVEEALLAT GQWKSITLFV QEDRAQLYID CEKMENAELD   180
VPIQSVFTRD LASIARLRIA KGGVNDNFQG VLQNVRFVFG TTPEDILRNK GCSSSTSVLL   240
TLDNNVVNGS SPAIRTNYIG HKTKDLQAIC GISCDELSSM VLBLRGLRTI VTTLQDSIRK   300
VTEENKELAN ELRRPPLCYH NGVQYRNNEE WTVDSCTECH CQNSVTICKK VSCPIMPCSN   360
ATVPDGECCP RCWPSDSADD GWSPWSEWTS CSTSCGNGIQ QRGRSCDSLN NRCEGSSVQT   420
RTCHIQECDK RFKQDGGWSH WSPWSSCSVT CGDGVITRIR LCNSPSPQMN GKPCEGEARE   480
TKACKKDACP INGGWGPWSP WDICSVTCGG GVQKRSRLCN NPAPQFGGKD CVGDVTENQI   540
CNKQDCPIDG CLSNPCFAGV KCTSYPDGSW KCGACPPGYS GNGIQCTDVD ECKEVPDACP   600
NHNGEHRCEN TDPGYNCLPC PPRFTGSQPF GQGVEHATAN KQVCKPRNPC TDGTHDCNKN   660
AKCNYLGHYS DPMYRCECKP GYAGNGIIQG EDTDLDGWPN ENLVCVANAT YHCKKDNCPN   720
LPNSGQEDYD KDGIGDACDD DDDNDKIPDD RDNCPFHYNP AQYDYDRDDV GDRCDNCPYN   780
HNPDQADTDN NGEGDACAAD IDGDGILNER DNCQYVYNVD QRDTDMDGVG DQCDNCPLEH   840
NPDQLDSDSD RIGDTCDNNQ DIDEDGHQNN LDNCPYVPNA NQADHDKDGK GDACDHDDDN   900
DGIPDDKDNC RLVPNPDQKD SDGDGRGDAC KDDFDHDSVP DIDDICPENV DISETDFRRF   960
QMIPLDPKGT SQNDPNWVVR HQGKELVQTV NCDPGLAVGY DEFNAVDFSG TFFINTERDD  1020
DYAGFVFGYQ SSSRFYVVMW KQVTQSYWDT NPTRAQGYSG LSVKVVNSTT GPGEHLRNAL  1080
WHTGNTPGQV RTLWHDPRHI GWKDFTAYRW RLSHRPKTGP IRVVMYEGKK IMADSGPIYD  1140
KTYAGGRLGL FVFSQEMVPP SDLKYECRDP                                   1170
```

Seq ID NO: C223 Protein Sequence
Protein Accession #: NP_002183.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MPLLWLRGFL LASCWIIVRS SPTPGSEGHS AAPDCPSCAL AALPKDVPNS QPEMVEAVKK    60
HILNMLHLKK RPDVTQPVPK AALLNAIRKL HVGKVGENGY VEIEDDIGRR AEMNELMEQT   120
SEIITFAESG TARKTLHFEI SKEGSDLSVV ERAEVWLFLK VPKANRTRTK VTIRLFQQQK   180
HPQGSLDTGE EAEEVGLKGE RSELLLSEKV VDARKSTWHV FPVSSSIQRL LDQGKSSLDV   240
RIACEQCQES GASLVLLGKK KKKEBEGEGK KKGGGEGGAG ADEEKEQSHR PFLMLQARQS   300
EDHPHRRRRR GLECDGKVNI CCKKQFFVSF KDIGWNDWII APSGYHANYC EGECPSHIAG   360
TSGSSLSFHS TVINHYRMRG HSPFANLKSC CVPTKLRPMS MLYYDDGQNI IKKDIQNMIV   420
EECGCS                                                             426
```

Seq ID NO: C224 Protein Sequence
Protein Accession #: NP_000086.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MVPDTACVLL LTLAALGASG QGQSPLGSDL GPQMLRELQE TNAALQDVRD WLRQQVREIT    60
FLKNTVMECD ACGMQQSVRT GLPSVRPLLH CAPGFCFPGV ACIQTESGGR CGPCPAGFTG   120
NGSHCTDVNE CNAHPCFPRV RCINTSPGFR CEACPPGYSG PTHQGVGLAP AKANKQVCTD   180
INECETGQHN CVPNSVCINT RGSFQCGPCQ PGFVGDQASG CQRGAQRFCP DGSPSECHEH   240
ADCVLERDGS RSCVCRVGWA GNGILCGRDT DLDGFPDEKL RCPEPQCRKD NCVTVPNSGQ   300
EDVDRDGIGD ACDPDADGDG VPNEKDNCPL VRNPDQRNTD EDKWGDACDN CRSQKNDDQK   360
DTDQDGRGDA CDDDIDGDRI RNQADNCPRV PNSDQKDSDG DGIGDACDNC PQKSNPDQAD   420
VDHDFVGDAC DSDQDQDGDG HQDSRDNCPT VPNSAQEDSD HDGQGDACDD DDDNDGVPDS   480
RDNCRLVPNP GQEDADRDGV GDVCQDDFDA DKVVDKIDVC PENAEVTLTD FRAFQTVVLD   540
PEGDAQIDPN WVVLNQGREI VQTMNSDPGL AVGYTAFNGV DPEGTPHVNT VTDDDYAGPI   600
FGYQDSSSFY VVMWKQMEQT YWQANPFRAV AEPGIQLKAV KSSTGPGEQL RNALWHTGDT   660
ESQVRLLWKD PRNVGWKDKK SYRWFLQHRP QVGYIRVRFY EGPELVADSN VVLDTTMRGG   720
RLGVFCPSQB NIIWANLRYR CNDTIPEDYE THQLRQA                           757
```

Seq ID NO: C225 Protein Sequence
Protein Accession #: NP_612464

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1          11         21         31         41         51
|          |          |          |          |          |
```

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        MRPQGPAASP QRLRGLLLLL LLQLPAPSSA SEIPKGKQKA QLRQREVVDL YNGMCLQGPA    60
        GVPGRDGSPG ANGIPGTPGI PGRDGFKGEK GECLRBSFEE SWTPNYKQCS WSSLNYGIDL   120
        GKIAECTFTK MRSNSALRVL FSGSLRLKCR NACCQRWYFT FNGAECSGPL PIEAIIYLDQ   180
        GSPEMNSTIN IHRTSSVEGL CEGIGAGLVD VAIWVGTCSD YPKGDASTGW NSVSRIIIEE   240
  5     LPK                                                                 243
```

Seq ID NO: C226 Protein Sequence
Protein Accession #: NP_003216.1

```
  10    1          11         21         31         41         51
        |          |          |          |          |          |
        MATMENKVIC ALVLVSMLAL GTLAEAQTET CTVAPRERQN CGFPGVTPSQ CANKGCCFDD    60
        TVRGVPWCFY PNTIDVPPEE ECEF                                          84
```

Seq ID NO: C227 Protein Sequence
Protein Accession #: NP_056234.1

```
  20    1          11         21         31         41         51
        |          |          |          |          |          |
        MPKRAHWGAL SVVLILLWGH PRVALACPHP CACYVPSEVH CTFRSLASVP AGIARHVERI    60
        NLGFNSIQAL SETSFAGLTK LELLMIHGNE IPSIPDGALR DLSSLQVFKF SYNKLRVITG   120
        QTLQGLSNLM RLHIDHNKIE FIHPQAFNGL TSLRLLHLEG NLLHQLHPST FSTFTFLDYF   180
        RLSTIRHLYL AENMVRTLPA SMLRNMPLLE NLYLQGNPWT CDCEMRWFLE WDAKSRGILK   240
  25    CKKDKAYEGG QLCAMCFSPK KLYKHEIHKL KDMTCLKPSI ESPLRQNRSR SIEEEQEQEE   300
        DGGSQLILEK FQLPQWSISL NMTDEHGNMV NLVCDIKKPM DVYKIHLNQT DPPDIDINAT   360
        VALDFECPMT RENYEKLWKL IAYYSEVPVK LHRELMLSKD PRVSYQYRQD ADEEALYYTG   420
        VRAQILAEPE WVMQPSIDIQ LNRRQSTAKK VLLSYYTQYS QTISTKDTRQ ARGRSWVMIE   480
        PSGAVQRDQT VLEGGPCQLS CNVKASESPS IFWVLPDGSI LKAPMDDPDS KFSILSSGWL   540
        RIKSMEPSDS GLYQCIAQVR DEMDRMVYRV LVQSPSTQPA EKDTVTIGKN PGESVTLPCN   600
  30    ALAIPEAHLS WILPNRRIIN DLANTSHVYM LPNGTLSIPK VQVSDSGYYR CVAVNQQGAD   660
        HFTVGITVTK KGSGLPSKRG RRPGAKALSR VREDIVEDEG GSGMGDEENT SRRLLHPKDQ   720
        EVPLKTKDDA INGDKKAKKG RRKLKLWKHS EKEPETNVAE GRRVFESRRR INMANKQINP   780
        ERWADILAKV RGKNLPKGTE VPPLIKTTSP PSLSLEVTPP FPAVSPPSAS PVQTVTSAEE   840
        SSADVPLLGE EEHVLGTISS ASMGLEHNHN GVILVEPEVT STPLEEVVDD LSEKTEEITS   900
  35    TEGDLKGTAA PTLISEPYEP SPTLHTLDTV YEKPTHEETA TEGWSAADVG SSPEPTSSEY   960
        EPPLDAVSLA ESEPMQYFDP DLETKSQPDE DKMKEDTFAH LTPTPTIWVN DSSTSQLFED  1020
        STIGEPGVPG QSHLQGLTDN IHLVKSSLST QDTLLIKKGM KEMSQTLQGG NMLEGDPTHS  1080
        RSSESEGQES KSITLPDSTL GIMSSMSPVK KPAETTVGTL LDKDTTTVTT TPRQKVAPSS  1140
        TMSTHPSRRR PNGRRRLRPN KFRHRHKQTP PTTFAPSETF STQPTQAPDI KISSQVESSL  1200
  40    VPTAWVDNTV NTPKQLEMEK NAEPTSKGTP RRKHGKRPNK HRYTPSTVSS RASGSKPSPS  1260
        PENKHRNIVT PSSETILLPR TVSLKTEGPY DSLDYMTTTR KIYSSYPKVQ ETLPVTYKPT  1320
        SDGKEIKDDV ATNVDKHKSD ILVTGESITN AIPTSRSLVS TMGEFKEESS PVGFPGTPTW  1380
        NPSRTAQPGR LQTDIPVTTS GENLTDPPLL KELEDVDFTS EFLSSLTVST PFHQEEAGSS  1440
        TTLSSIKVEV ASSQAETTTL DQDHLETTVA ILLSETRPQN HTPTAARMKE PASSSPSTIL  1500
  45    MSLGQTTTTK PALPSPRISQ ASRDSKENVF LNYVGNPETE ATPVNNEGTQ HMSGPNELST  1560
        PSSDRDAFNL STKLELEKQV FGSRSLPRGP DSQRQDGRVH ASHQLTRVPA KPILPTATVR  1620
        LPEMSTQSAS RYFVTSQSPR HWTNKPEITT YPSGALPENK QFTTPRLSST TIPLPLHMSK  1680
        PSIPSKFTDR RTDQFNGYSK VFGNNNIPEA RNPVGKPPSP RIPHYSNGRL PFFTNKTLSF  1740
        PQLGVTRRPQ IPTSPAPVMR ERKVIPGSYN RIHSHSTFHL DFGPPAPPLL HTPQTTGSPS  1800
  50    TNLQNIPMVS STQSSISPIT SSVQSSGSPH QSSSKFFAGG PPASKFWSLG EKPQILTKSP  1860
        QTVSVTAETD TVFPCEATGK PKPFVTWTKV STGALMTPNT RIQRFEVLKN GTLVIRKVQV  1920
        QDRGQYMCTA SNLHGLDRMV VLLSVTVQQP QILASHYQDV TVYLGDTIAM ECLAKGTPAP  1980
        QISWIFPDRR VWQTVSPVES RITLHENRTL SIKEASFSDR GVYKCVASNA AGADSLAIRL  2040
        HVAALPPVIH QEKLENISLP PGLSIHIHCT AKAAPLPSVR WVLGDGTQIR PSQFLHGNLF  2100
  55    VFPNGTLYIR NLAPKDSGRY ECVAANLVGS ARRTVQLNVQ RAAANARITG TSPRRTDVRY  2160
        GGTLKLDCSA SGDPWPRILW RLPSKRMIDA LPSFDSRIKV FANGTLVVKS VTDKDAGDYL  2220
        CVARNKVGDD YVVLKVDVVM KPAKIEHKEE NDHKVFYGGD LKVDCVATGL PNPEISWSLP  2280
        DGSLVNSFMQ SDDSGGRTKR YVVFNNGTLY FNEVGMREEG DYTCFAENQV GKDEMRVRVK  2340
        VVTAPATIRN KTYLAVQVPY GDVVTVACEA KGEPMPKVTW LSPTNKVIPT SSEKYQIYQD  2400
  60    GTLLIQKAQR SDSGNYTCLV RNSAGEDRKT VWIHVNVQPP KINGNPNPIT TVREIAAGGS  2460
        RKLIDCKAEG IPTPRVLWAF PEGVVLPAPY YGNRITVHGN GSLDIRSLRK SDSVQLVCMA  2520
        RNEGGEARLI VQLTVLEPME KPIFHDPISE KITAMAGHTI SLNCSAAGTP TPSLVWVLPN  2580
        GTDLQSGQQL QRFYHKADGM LHISGLSSVD AGAYRCVARN AARTHERLVS LKVGLKPEAN  2640
        KQYHNLVSII NGETLKLPCT PPGAGQGRFS WTLPNGMHLE GPQTLGRVSL LDNGTLTVRE  2700
  65    ASVFDRGTYV CRMETEYGPS VTSIPVIVIA YPPRITSEPT PVIYTRPGNT VKLNCMAMGI  2760
        PKADITWELP DKSHLKAGVQ ARLYGNRFLH PQGSLTIQHA TQRDAGFYKC MAKNILGSDS  2820
        KTTYIHVF                                                          2828
```

Seq ID NO: C228 Protein Sequence
Protein Accession #: Eos sequence

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  70    1          11         21         31         41         51
        |          |          |          |          |          |
        MPGTKLTRTG APADYRVILK TSQEDELDVP DDISVRVMSS QSVLVSWVDP VLEKQKKVVA    60
  75    SRQYTVRYRE KGELARWDYK QIANRRVLIB NLIPDTVYEF AVRISQGERD GKWSTSVFQR   120
        TPESAPTTAP ENLNVWPVNG KPTVVAASWD ALPETEGKVK VCLLDTGLPS VSSFQPSAKS   180
        FQNTFFHTPR LSNHLEQSPS PILETLLLPW WMVCSLGNAI FSKSGPQTGE AWDLTPKPSL   240
        SLCQQECSCT QKDPSCLAYL IDIQTKQVNK DPQLEGSVPG PCFLFYPLTP MLDIGGPSPI   300
  80    MCYEDP?VSS LTGNSLKSVA ASRADVQQNT EDNGKPEKPE PSSPSPRAPA SSQHPSVPAS   360
        PQGRNAKDLL LDLKNKILAN GGAPRKPQLR AKKAEELDLQ STEITGEEEL GSREDSPMSP   420
        SDTQDQKRTL RPPSRHGHSV VAPGRTAVRA RMPALPRREG VDKPGPSLAT QPRPGAPPSA   480
        SASPAHHAST QGTSHRPSLP ASLNDNDLVD SDEDERAVGS LHPKGAFAQP RPALSPSRQS   540
        PSSVLRDRSS VHPGAKPASP ARRTPHSGAA EEDSSASAPP SRLSPPHGGS SRLLPTQPHL   600
        SSPLSKGGKD GEDAPATNSN APSRSTMSSS VSSHLSSRTQ VSEGAEASDG ESHGDGDRED   660
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          GGRQAEATAQ TLRARPASGH FHLLRHKPFA ANGRSPSRFS IGRGPRLQPS SSPQSTVPSR    720
          AHPRVPSHSD SHPKLSSGIH GDEEDEKPLP ATVVNDHVPS SSRQPISRGW EDLRRSPQRG    780
          ASLHRKEPIP ENPKSTGADT HPQGKYSSLA SKAQDVQQST DADTEGHSPK AQPGSTDRHA    840
    5     SPARPPAARS QQHPSVPRRM TPGRAPEQQP PPPVATSQHH PGPQSRDAGR SPSQPRLSLT    900
          QAGRPRPTSQ GRSHSSSDPY TASSRGMLPT ALQNQDEDAQ GSYDDDSTEV EAQDVRAPAH    960
          AARAKEAAAS LPKHQQVESP TGAGAGGDHR SQRGHAASPA RPSRPGGPQS RARVPSRAAP   1020
          GKSEPPSKRP LSSKSQQSVS AEDEEEEDAG PFKGGKEDLL SSSVPKWPSS STPRGGKDAD   1080
          GSLAKEEREP AIALAPRGGS LAPVKRPLPP PPGSSPRASH VPSRPPPRSA ATVSPVAGTH   1140
    10    PWPRYTTRAP PGHFSTTPML SLRQRMMHAR FRNPLSRQPA RPSYRGGYNG RPNVEGKVLP   1200
          GSNGKPNGQR IINGPQGTKW VVDLDRGLVL NAEGRYLQDS HGNPLRIKLG GDGRTIVDLE   1260
          GTPVVSPDGL PLFGQGRHGT PLANAQDKPI LSLGGKPLVG LEVIKKTTHP PTTTMQPTTT   1320
          TTPLPTTTTP RPTTATTMQP TTTTTPLPTT TPRPTTATTR RTTTRRPTTT VRTTTRTTTT   1380
          TTPKPTTPIP TCPPGTLERH DDDGNLIMSS NGIPECYAEE DEFSGLETDT AVPTEEAYVI   1440
          YDEDYEFETS RPPTTTEPST TATTPRVIPE EGAISSFPEE EFDLAGRKRF VAPYVTYLNK   1500
    15    DPSAPCSLTD ALDHFQVDSL DEIIPNDLKK SDLPPQHAPR NITVVAVEGC HSFVIVDWDK   1560
          ATPGDLVTGY LVYSASYEDF IRNKFSTQAS SVTHLPIENL KPNTRYYFKV QAQNPHGYGP   1620
          ISPSVSFVTE SDNPLLVVRP PGGELSGSHS LSNMIPATRT AMDGNM                  1666
```

    20   Seq ID NO: C229 Protein Sequence
          Protein Accession #: NP_003005.1

```
          1          11         21         31         41         51
          |          |          |          |          |          |
          MFLSILVALC LWLHLALGVR GAPCEAVRIP MCRHMPWNIT RMPNHLHHST QENAILAIEQ    60
    25    YEELVDVNCS AVLRFFFCAM YAPICTLEFL HDPIKPCKSV CQRARDDCEP LMKMYNHSWP   120
          ESLACDELPV YDRGVCISPE AIVTDLPEDV KWIDITPDMM VQERPLDVDC KRLSPDRCKC   180
          KKVKPTLATY LSKNYSYVIH AKIKAVQRSG CNEVTTVVDV KEIFKSSSPI PRTQVPLITN   240
          SSCQCPHILP HQDVLIMCYE WRSRMMLLEN CLVEKWRDQL SKRSIQWEER LQEQRRTVQD   300
          KKKTAGRTSR SNPPKPKGKP PAPKPASPKK NIKTRSAQKR TNPKRV                  346
    30
```

          Seq ID NO: C230 Protein Sequence
          Protein Accession #: NP_005931.1

```
    35    1          11         21         31         41         51
          |          |          |          |          |          |
          MAPAAWLRSA AARALLPPML LLLLQPPPLL ARALPPDVHH LHAERRGPQP WHAALPSSPA    60
          PAPATQEAPR PASSLRPPRC GVPDPSDGLS ARNRQKRFVL SGGRWEKTDL TYRILRFPWQ   120
          LVQEQVRQTM AEALKVWSDV TPLTPTEVHE GRADIMIDFA RYWHGDDLPF DGPGGILAHA   180
    40    FPPKTHREGD VHFDYDETWT IGDDQGTDLL QVAAHEFGHV LGLQHTTAAK ALMSAFYTFR   240
          YPLSLSPDDC RGVQHLYGQP WPTVTSRTPA LGPQAGIDTN BIAPLEPDAP PDACEASFDA   300
          VSTIRGELFF FKAGFVWRLR GGGLQPGYPA LASRHWQGLP SPVDAAFEDA QGHIWFFQGA   360
          QYWVYDGEKP VLGPAPLTEL GLVRFPVHAA LVWGPEKNKI YFFRGRDYWR FHPSTRRVDS   420
          PVPRRATDWR GVPSEIDAAF QDADGYAYFL RGRLYWKFDP VKVKALEGFP RLVGPDFFGC   480
    45    ARPANTFL                                                          488
```

          Seq ID NO: C231 Protein Sequence
          Protein Accession #: NP_076927

```
    50    1          11         21         31         41         51
          |          |          |          |          |          |
          MGENDPPAVE APFSPRSLFG LDDLKISPVA PDADAVAAQI LSLLPLKFFP IIVIGIIALI    60
          LALAIGLGIH FDCSGKYRCR SSFKCIELIA RCDGVSDCKD GEDEYRCVRV GGQNAVLQVF   120
          TAASWKTMCS DDWKGHYANV ACAQLGFPSY VSSDNLRVSS LEGQFREEFV SIDHLLPDDK   180
    55    VTALHHSVYV REGCASGHVV TLQCTACGHR RGYSSRIVGG NMSLLSQWPW QASLQFQGYH   240
          LCGGSVITPL WIITAAHCVY DLYLPKSWTI QVGLVSLLDN PAPSHLVEKI VYHSKYKPKR   300
          LGNDIALMKL AGPLTFNEMI QPVCLPNSEE NFPDGKVCWT SGWGATEDGG DASFVLNHAA   360
          VPLISNKICN HRDVYGGIIS PSMLCAGYLT GGVDSCQGDS GGPLVCQERR LWKLVGATSF   420
    60    GIGCAEVNKP GVYTRVTSPL DWIHEQMERD LKT                                453
```

          Seq ID NO: C232 Protein Sequence
          Protein Accession #: NP_003211

```
    65    1          11         21         31         41         51
          |          |          |          |          |          |
          MLWKLTDNIK YEDCEDRHDG TSNGTARLPQ LGTVGQSPYT SAPPLSHTPN ADFQPPYFPP    60
          PYQPIYPQSQ DPYSHVNDPY SLNPLHAQPQ PQHPGWPGQR QSQESGLLHT HRGLPHQLSG   120
          LDPRRDYRRH EDLLHGPHAL SSGLGDLSIH SLPHAIEEVP HVEDPGINIP DQTVIKKGPV   180
    70    SLSKSNSNAV SAIPINKDNL FGGVVNPNEV PCSVPGRLSL LSSTSKYKVT VAEVQRRLSP   240
          PECLNASLLG GVLRRAKSKN GGRSLREKLD KIGLNLPAGR RKAANVTLLT SLVEGEAVHL   300
          ARDPGYVCET EFPAKAVAEF LNRQHSDPNE QVTRKNMLLA TKQICKEFTD LLAQDRSPLG   360
          NSRPNPILEP GIQSCLTHFN LISHGFGSPA VCAAVTALQN YLTEALKAMD KMYLSNNPNS   420
          HTDNNAKSSD KEEKHRK                                                 437
```

    75   Seq ID NO: C233 Protein Sequence
          Protein Accession #: NP_002979.1

```
          1          11         21         31         41         51
          |          |          |          |          |          |
    80    MKGLAAALLV LVCTMALCSC AQVGTNKELC CLVYTSWQIP QKFIVDYSET SPQCPKPGVI    60
          LLTKRGRQIC ADPNKKWVQK YISDLKLNA                                    89
```

          Seq ID NO: C234 Protein Sequence
          Protein Accession #: NP_004054.1

```
1           11          21          31          41          51
|           |           |           |           |           |
MILQAHLHSL  CLLMLYLATG  YGQEGKFSGP  LKPMTFSIYE  GQEPSQIIFQ  FKANPPAVTP   60
ELTGETDNIF  VIEREGLLYY  NRALDRETRS  THNLQVAALD  ANGIIVEGPV  PITIEVKDIN  120
DNRPTFLQSK  YEGSVRQNSR  PGKPFLYVNA  TDLDDPATPN  GQLYYQIVIQ  LPMINNVMYF  180
QINNKTGAIS  LTREGSQELN  PAKNPSYNLV  ISVKDMGGQS  ENSFSDTTSV  DIIVTENIWK  240
APKPVEMVEN  STDPHPIKIT  QVRWNDPGAQ  YSLVDKEKLP  RFPFSIDQEG  DIYVTQPLDR  300
EEKDAYVFYA  VAKDEYGKPL  SYPLEIHVKV  KDINDNPPTC  PSPVTVFEVQ  ENERLGNSIG  360
TLTAHDRDEE  NTANSFLNYR  IVEQTPKLPM  DGLFLIQTYA  GMLQLAKQSL  KKQDTPQYNL  420
TIEVSDKDFK  TLCFVQINVI  DINDQIPIFE  KSDYGNLTLA  EDTNIGSTIL  TIQATDADEP  480
FTGSSKILYH  IIKGDSEGRL  GVDTDPHTNT  GYVIIKKPLD  PETAAVSNIV  FKAENPEPLV  540
FGVKYNASSF  AKFTLIVTDV  NEAPQFSQHV  FQAKVSEDVA  IGTKVGNVTA  KDPEGLDISY  600
SLRGDTRGWL  KIDHVTGEIF  SVAPLDREAG  SPYRVQVVAT  EVGGSSLSSV  SEFHLILMDV  660
NDNPPRLAKD  YTGLFFCHPL  SAPGSLIFEA  TDDDQHLFRG  PHFTFSLGSG  SLQNDWEVSK  720
INGTHARLST  RHTEFEEREY  VVLIRINDGG  RPPLEGIVSL  PVTFCSCVEG  SCFRPAGHQT  780
GIPTVGMAVG  ILLTTLLVIG  IILAVVFIRI  KKDKGKDNVE  SAQASEVKPL  RS          832
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Seq ID NO: C235 Protein Sequence
Protein Accession #: NP_004434.1

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1           11          21          31          41          51
|           |           |           |           |           |
MARARPPPPP  SPPPGLLPLL  PPLLLLPLLL  LPAGCRALEE  TLMDTKWVTS  ELAWTSHPES   60
GWEEVSGYDE  AMNPIRTYQV  CNVRESSQNN  WLRTGFIWRR  DVQRVYVELK  FTVRDCNSIP  120
NIPGSCKETF  NLFYYEADSD  VASASSPFWM  ENPYVKVDTI  APDESFSRLD  AGRVNTKVRS  180
FGPLSKAGFY  LAFQDQGACM  SLISVRAFYK  KCASTTAGFA  LFPETLTGAE  PTSLVIAPGT  240
CIPNAVEVSV  PLKLYCNGDG  EWMVPVGACT  CATGHEPAAK  ESQCRPCPPG  SYKAKQGEGP  300
CLPCPPNSRT  TSPAASICTC  HNNFYRADSD  SADSACTTVP  SPPRGVISNV  NETSLILEWS  360
EPRDLGGRDD  LLYNVICKKC  HGAGGASACS  RCDDNVEFVP  RQLGLTERRV  HISHLLAHTR  420
YTFEVQAVNG  VSGKSPLPPR  YAAVNITTNQ  AAPSEVPTLR  LHSSSGSSLT  LSWAPPERPN  480
GVILDYEMKY  FEKSEGIAST  VTSQMNSVQL  DGLRPDARYV  VQVRARTVAG  YGQYSRPAEF  540
ETTSERGSGA  QQLQEQLPLI  VGSATAGLVF  VVAVVVIAIV  CLRKQRHGSD  SEYTEKLQQY  600
IAPGMKVYID  PFTYEDPNEA  VREFAKEIDV  SCVKIEEVIG  AGEFGEVCRG  RLKQPGRREV  660
FVAIKTLKVG  YTERQRRDFL  SEASIMGQFD  HPNIIRLEGV  VTKSRPVMIL  TEFMENCALD  720
SFLRLNDGQF  TVIQLVGMLR  GIAAGMKYLS  EMNYVHRDLA  ARNILVNSNL  VCKVSDFGLS  780
RFLEDDPSDP  TYTSSLGGKI  PIRWTAPEAI  AYRKFTSASD  VWSYGIVMWE  VMSYGERPYW  840
DMSNQDVINA  VEQDYRLPPP  MDCPTALHQL  MLDCWVRDRN  LRPKFSQIVN  TLDKLIRNAA  900
SLKVIASAQS  GMSQPLLDRT  VPDYTTPTTV  GDWLDAIKMG  RYKESFVSAG  FASFDLVAQM  960
TAEDLLRIGV  TLAGHQKKIL  SSIQDMRLQM  NQTLPVQV               998
```

Seq ID NO: C236 Protein Sequence
Protein Accession #: NP_001795.1

```
1           11          21          31          41          51
|           |           |           |           |           |
MYVGYVLDKD  SPVYPGPARP  ASLGLGPANY  GPPAPPPAPP  QYPDFSSYSH  VEPAPAPPTA   60
WGAPFPAPKD  DWAAAYGPGP  AAPAASPASL  AFGPPPDFSP  VTDHQRLELE  LLAQPLGGPG  120
TPSSPGAQRP  TPYEWMRRSV  AAGGGGGSGK  TRTKDKYRVV  YTDHQRLELE  KEFHYSRYIT  180
IRRKSELAAN  LGLTERQVKI  WFQNRRAKER  KVNKKKQQQQ  QPPQPPMAHD  ITATPAGPSL  240
GGLCPSNTSL  LATSSPMPVK  EEFLP                                          265
```

Seq ID NO: C237 Protein Sequence
Protein Accession #: NP_068813.1

```
1           11          21          31          41          51
|           |           |           |           |           |
MGSDRARKGG  GGPKDFGAGL  KYNSRHEKVN  GLEEGVEFLP  VNNVKKVEKH  GPGRWVVLAA   60
VLIGLLLVLL  GIGFLVWHLQ  YRDVRVQKVF  NGYMRITNEN  FVDAYENSNS  TEFVSLASKV  120
KDALKLLYSG  VPFLGPYHKE  SAVTAFSEGS  VIAYYWSEFS  IPQHLVEEAE  RVMAEERVVM  180
LPPRARSLKS  FVVTSVVAFP  TDSKTVQRTQ  DNSCSFGLHA  RGVELMRFTT  PGFPDSPYPA  240
HARCQWALRG  DADSVLSLTF  RSFDLASCDE  RGSDLVTVYN  TLSPMEPHAL  VQLCGTYPPS  300
YNLTFHSSQN  VLLITLITNT  ERRHPGPEAT  FFQLPRMSSC  GGRLRKAQGT  FNSPYYPGHY  360
PPNIDCTWNI  EVPNNQRVKV  RFKFFYLLEP  GVPAGTCPKD  YVEINGEKYC  GERSQFVVTS  420
NSNKITVRFH  SDQSYTDTGF  LAEYLSYDSS  DPCPGQFTCR  TGRCIRKELR  CDGWADCTDH  480
SDELNCSCDA  GHQFTCKNKF  CKPLFWVCDS  VNDCGDNSDE  QGCSCPAQTF  RCSNGKCLSK  540
SQQCNGKDDC  GDGSDEASCP  KVNVVTCTKH  TYRCLNGLCL  SKGNPECDCGK  EDCSDGSDEK  600
DCDCGLRSFT  RQARVVGGTD  ADEGEWPWQV  SLHALGQGHI  CGASLISPNW  LVSAAHCYID  660
DRGFRYSDPT  QWTAFLGLHD  QSQRSAPGVQ  ERRLKRIISH  PFFNDFTFDY  DIALLELEKP  720
AEYSSMVRPI  CLPDASHVFP  AGKAIWVTGW  GHTQYGGTGA  LILQKGEIRV  INQTTCENLL  780
PQQITPRMMC  VGPLSGGVDS  CQGDSGGPLS  SVEADGRIFQ  AGVVSWGDGC  AQRNKPGVYT  840
RLPLFRDWIK  ENTGV                                                      855
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Seq ID NO: C238 Protein Sequence
Protein Accession #: Eos sequence

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1           11          21          31          41          51
|           |           |           |           |           |
MPPFLLLEAV  CVPLFSRVPP  SLPLQEVHVS  KETIGKISAA  SKMMWCSAAV  DIMFLLDGSN   60
SVGKGSFERS  KHFAITVCDG  LDISPERVRV  GAFQFSSTPH  LEFPLDSFST  QQEVKARIKR  120
MVFKGGRTET  BLALKYLLHR  GLPGGRNASV  PQILIIVTDG  KSQGDVALPS  KQLKERGVTV  180
FAVGVRFPRW  EELHALASEP  RGQHVLLAEQ  VEDATNGLFS  TLSSSAICSS  ATPDCRVEAH  240
PCEHRTLEMV  REFAGNAPCW  RGSRRTLAVL  AAHCPFYSWK  RVFLTHPATC  YRTTCPGPCD  300
SQPCQNGGTC  VPEGLDGYQC  LCPLAFGGEA  NCALKLSLEC  RVDLLFLLDS  SAGTTLDGFL  360
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        RAKVFVKRFV RAVLSEDSRA RVGVATYSRE LLVAVPVGEY QDVPDLVWSL DGIPFRGGPT    420
        LTGSALRQAA ERGFGSATRT GQDRPRRVVV LLTESHSEDE VAGPARHARA RELLLLGVGS    480
        EAVRAELEEI TGSPKHVMVY SDPQDLFNQI PELQGKLCSR QRPGCRTQAL DLVFMLDTSA    540
  5     SVGPENPAQM QSFVRSCALQ FEVNPDVTQV GLVVYGSQVQ TAFGLDTKPT RAAMLRAISQ    600
        APYLGGVGSA GTALLHIYDK VMTVQRGARP GVPKAVVVLT GGRGAEDAAV PAQKLRNNGI    660
        SVLVVGVGPV LSEGLRRLAG PRDSLIHVAA YADLRYHQDV LIEWLCGEAK RPVNLCKPSP    720
        CMNEGSCVLQ NGSYRCKCRD GWEGPHCENR FLRRP                               755
```

10   Seq ID NO: C239 Protein Sequence
        Protein Accession #: Eos sequence

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        1          11         21         31         41         51
        |          |          |          |          |          |
 15     MPPFLLLEAV CVFLFSRVPP SLPLQEVHVS·KETIGKISAA SKMMWCSAAV DIMFLLDGSN    60
        SVGKGSFERS KHPAITVCDG LDISPERVRV GAFQFSSTPH LEFPLDSFST QQEVKARIKR   120
        MVFKGGRTET ELALKYLLHR GLPGGRNASV PQILIIVTDG KSQGDVALPS KQLKERGVTV   180
        FAVGVRFPRW EELHALASEP RGQHVLLAEQ VEDATNGLFS TLSSSAICSS ATPDCRVEAH   240
        PCEHRTLEMV REFAGNAPCW RGSRRTLAVL AAHCPFYSWK RVFLTHPATC YRTTCPGPCD   300
 20     SQPCQNGGTC VPEGLDGYQC LCPLAFGGEA NCALKLSLEC RVDLLFLLDS SAGTTLDGFL   360
        RAKVFVKRFV RAVLSEDSRA RVGVATYSRE LLVAVPVGEY QDVPDLVWSL DGIPFRGGPT   420
        LTGSALRQAA ERGFGSATRT GQDRPRRVVV LLTESHSEDE VAGPARHARA RELLLLGVGS   480
        EAVRAELEEI TGSPKHVMVY SDPQDLFNQI PELQGKLCSR QRPGCRTQAL DLVFMLDTSA   540
        SVGPENPAQM QSFVRSCALQ FEVNPDVTQV GLVVYGSQVQ TAFGLDTKPT RAAMLRAISQ   600
 25     APYLGGVGSA GTALLHIYDK VMTVQRGARP GVPKAVVVLT GGRGAEDAAV PAQKLRNNGI   660
        SVLVVGVGPV LSEGLRRLAG PRDSLIHVAA YADLRYHQDV LIEWLCGEAK QPVNLCKPSP   720
        CMNEGSCVLQ NGSYRCKCRD GWEGPHCENR EWSSCSVCVS QGWILETPLR HMAPVQEGSS   780
        RTPPSNYREG LGTEMVPTFW NVCAPGP                                      807
```

        Seq ID NO: C240 Protein Sequence
 30   Protein Accession #: XP_097386.1

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        1          11         21         31         41         51
        |          |          |          |          |          |·
        MPKSEPLGCL SPASRAPGSA AATGAWLPAA SGGPGPLGPP CTCPPRSLGR GRAGSRAGSS    60
 35     PSGCVCVSGI LRVVSVGDPA SRRWVDLDSN SEDLSLLLTP MIVGTGGVGG GWARGWVPAQ   120
        EKEVAEGSGH AGRGNGRRLQ RVYGARSWIL GRKPCLQRLL PASGGPVQPQ PCPSPATACR   180
        WGFKPGVAFW GAAQHPPLCR LGGGRAVPSA TRTLDGF                            217
```

        Seq ID NO: C241 Protein Sequence
 40   Protein Accession #: CAC03433

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        1          11         21         31         41         51
        |          |          |          |          |          |
        MLSSTDFTFA SWELVVRVDH PNEEQQKDVT LRVSGDLHVG GVMLKLVEQI NISQDWSDFA    60
 45     LWWEQKHCWL LKTHWTLDKY GVQADAKLLF TPQHKMLRLR LPNLKMVRLR VSFSAVVFKA   120
        VSDICKILNI RRSEELSLLK PSGDYFKKKK KKDKNNKEPI IEDILNLESS PTASGSSVSP   180
        GLYSKTMTPI YDPINGTPAS STMTWFSDSP LTEQNCSILA FSQPPQSPEA LADMYQPRSL   240
        VDKAKLNAGW LDSSRSLMEQ GIQEDEQLLL RFKYYSFFDL NPKYDAVRIN QLYEQARWAI   300
        LLEEIDCTEE EMLIPAALQY HISKLSLSAE TQDFAGESEV DEIEAALSNL EVTLEGGKAD   360
 50     SLLEDITDIP KLADNLKLFR PKKLLPKAFK QYWPIFKDTS IAYFKNKELE GGEPLEKLNL   420
        RGCEVVPDVN VAGRKFGIKL LIPVADGMNE MYLRCDHENQ YAQWMAACML ASKGKTMADS   480
        SYQPEVLNIL SFLRMKNRNS ASQVASSLEN MDMNPECFVS PRCAKKHKSK QLAARILEAH   540
        QNVAQMPLVE AKLRFIQAWQ SLPEFGLTYY LVRFKGSKKD DILGVSYNRL IKIDAATGIP   600
        VTTWRFTNIK QHNVNWETRQ VVIEFDQNVP TAFTCLSADC KIVHEYIGGY IFLSTRSKDQ   660
 55     NETLDEDLFH KLTGGQD                                                  677
```

        Seq ID NO: C242 DNA Sequence
        Nucleic Acid Accession #: NM_005170
 60   Coding sequence: 337..918

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        1          11         21         31         41         51
        |          |          |          |          |          |
        GGGCGTGAGA AAGGCGACGG CGGCGGCGCG GAGGAGGGTT ATCTATACAT TTAAAAACCA    60
 65     GCCGCCTGCG CCGCGCCTGC GGAGACCTGG GAGAGTCCGG CCGCACGCGC GGGACACGAG   120
        CGTCCCACGC TCCCTGGCGC GTACGGCCTG CCACCACTAG GCCTCCTATC CCCGGGCTCC   180
        AGACGACCTA GGACGCGTGC CCTGGGGAGT TGCCTGGCGG CGCCGTGCCA GAAGCCCCCT   240
        TGGGGCGCCA CAGTTTTCCC CGTCGCCTCC GGTTCCTCTG CCTGCACCTT CCTGCGGCGC   300
        GCCGGGACCT GGAGCGGGCG GGTGGATGCA GGCGCGATGG CGGCGCGGCAC ACTGCCCAGG   360
 70     TCCGCGCCCC CTGCGCCCCC CGTCCCTGTC GGCTGCGCTG CCCGGCGGAG ACCCGCGTCC   420
        CCGGAACTGT TGCGCTGCAG CCGGCGGCGG CGACCGGCCA CCGCAGAGAC CGGAGGCGGC   480
        GCAGCGGCCG TAGCGCGGCG CAATGAGCGC GAGCGCAACC GCGTGAAGCT GGTGAACTTG   540
        GGCTTCCAGG CGCTGCGGCA GCACGTGCCG CACGGCGGCG CCAGCAAGAA GCTGAGCAAG   600
        GTGGAGACGC TGCGCTCAGC CGTGGAGTAC ATCCGCGCGC TGCAGCGCCT GCTGGCCGAG   660
 75     CACGACGCCG TGCGCAACGC GCTGGCGGGA GGGCTGAGGC CGCACGCCGT GCGGCCGTCT   720
        GCGCCCCGCG GGCCGCCAGG GACCACCCCG GTCGCCGCCT CGCCCTCCCG CGCTTCTTCG   780
        TCCCCGGGCC GCGGGGGCAG CTCGGAGCCC GGCTCCCCGC GTTCGCGCCTA CTCGTCGGAC   840
        GACAGCGGCT GCGAAGGCGC GCTGAGTCCT GCGGAGCGCG AGCTACTCGA CTTCTCCAGC   900
        TGGTTAGGGG GCTACTGAGC GCCCTCGACC TA                                932
```
 80
        Seq ID NO: C243 Protein Sequence
        Protein Accession #: NP_060233.1

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        1          11         21         31         41         51
```

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        |         |         |         |         |         |
        MSGGHQLQLA ALWPWLLMAT LQAGFGRTGL VLAAAVESER SAEQKAVIRV IPLKMDPTGK   60
        LNLTLEGVFA GVAEITPAEG KLMQSHPLYL CNASDDDNLE PGFISIVKLE SPRRAPRPCL  120
5       SLASKARMAG ERGASAVLFD ITEDRAAAEQ LQQPLGLTWP VVLIWGNDAE KLMEFVYKNQ  180
        KAHVRIELKE PPAWPDYDVW ILMTVVGTIP VIILASVLRI RCRPRHSRPD PLQQRTAWAI  240
        SQLATRRYQA SCRQARGEWP DSGSSCSSAP VCAICLEEFS EGQELRVISC LHEFHRNCVD  300
        PWLHQHRTCP LCVFNITEGD SFSQSLGPSR SYQEPGRRLH LIRQHPGHAH YHLPAAYLLG  360
        PSRSAVARPP RPGPFLPSQE PGMGPRHHRF PRAAHPRAPG EQQRLAGAQH PYAQGWGMSH  420
10      LQSTSQHPAA CPVPLRRARP PDSSGSGESY CTERSGYLAD GPASDSSSGP CHGSSSDSVV  480
        NCTDISLQGV HGSSSTFCSS LSSDFDPLVY CSPKGDPQRV DMQPSVTSRP RSLDSVVPTG  540
        ETQVSSHVHY HRHRHHHYKK RFQWHGRKPG PETGVPQSRP PIPRTQPQPE PPSPDQQVTG  600
        SNSAAPSGRL SNPQCPRALP EPAPGPVDAS SICPSTSSLF NLQKSSLSAR HPQRKRRGGP  660
15      SEPTPGSRPQ DATVHPACQI FPHYTPSVAY PWSPEAHPLI CGPPGLDKRL LPETPGPCYS  720
        NSQPVWLCLT PRQPLEPHPP GEGPSEWSSD TAEGRPCPYP HCQVLSAQPG SEEELEELCE  780
        QAV                                                               783

        Seq ID NO: C244 DNA Sequence
20      Nucleic Acid Accession #: NM_004289
        Coding sequence: 493..1695

        1         11        21        31        41        51
        |         |         |         |         |         |
        GCCGCCGCCT CGTCCACCGG AGGAGCCGGC GCCAGCGTGG ACGGCGGCAG CCAGGCTGTG   60
25      CAGGGGGGCG GCGGGGACCC CCGAGCGGCT CGGAGTGGCC CCTTGGACGC CGGGGAAGAG  120
        GAGAAGGCAC CCGCGGAACC GACGGCTCAG GTGCGCGGATG TGCGAGCGAG  180
        GAGAATGGGG TACTAAGAGA AAAGCACGAA GCTGTGGATC ATAGTTCCCA GCATGAGGAA  240
        AATGAAGAAA GGGTGTCAGC CCAGAAGGAG AACTCACTTC AGCAGAATGA TGATGATGAA  300
        AACAAAATAG CAGAGAAACC TGACTGGGAC GCAGAAAAGA CCACTGAATC TAGAAATGAG  360
        AGACATCTGA ATGGGACAGA TACTTCTTTC TCTCTGGAAG ACTTATTCCA GTTGCTTTCA  420
30      TCACAGCCTG AAAATTCACT GGAGGGCATC TCATTGGGAG ATATTCCTCT TCCAGGCAGT  480
        ATCAGTGATG GCATGAATTC TTCAGCACAT TATCATGTAA ACTTCAGCCA GGCTATAAGT  540
        CAGGATGTGA ATCTTCATGA GGCCATCTTG CTTTGTCCCA ACAATACATT TAGAAGAGAT  600
        CCAACAGCAA GGACTTCACA GTCACAAGAA CCATTTCTGC AGTTAAATTC TCATACCACC  660
        AATCCTGAGC AAACCCTTCC TGGAACTAAT TTGACAGGAT TTCTTTCACC GGTTGACAAT  720
35      CATATGAGGA ATCTAACAAG CCAAGACCTA CTGTATGACC TTGACATAAA TATATTTGAT  780
        GAGATAAACT TAATGTCATT GGCCACAGAA GACAACTTTG ATCCAATCGA TGTTTCTCAG  840
        CTTTTTGATG AACCAGATTC TGATTCTGGC CTTTCTTTAG ATTCAAGTCA CAATAATGC  900
        TCTGTCATCA AGTCTAATTC CTCTCACTCT GTGTGTGATG AAGGTGCTAT AGGTTATTGC  960
        ACTGACCATG AATCTAGTTC CCATCATGAC TTAGAAGGTG CTGTAGGTGG CTACTACCCA 1020
40      GAACCCAGTA AGCTTTGTCA CTTGGATCAA AGTGATTCTG ATTTCCATGG AGATCTTACA 1080
        TTTCAACACG TATTTCATAA CCACACTTAC CACTTACAGC CAACTGCACC AAATCTACT 1140
        TCTGAACCTT TTCCGTGGCC TGGGAAGTCA CAGAAGATAA GGAGTAGATA CCTTGAAGAC 1200
        ACAGATAGAA ACTTGAGCCG TGATGAACAG CGTGCTAAAG CTTTGCATAT CCCTTTTTCT 1260
        GTAGATGAAA TTGTCGGCAT GCCTGTTGAT TCTTTCAATA GCATGTTAAG TAGATATTAT 1320
45      CTGACAGACC TACAAGTCTC ACTTATCCGT GACATCAGC GAAGAGGGAA AAATAAAGTT 1380
        GCTGCGCAGA ACTGTCGTAA ACGCAAATTG GACATAATTT TGAATTTAGA AGATGATGTA 1440
        TGTAACTTGC AAGCAAAGAA GGAAACTCTT AAGAGAGAGC AAGCACAATG TAACAAAGCT 1500
        ATTAACATAA TGAAACAGAA ACTGCATGAC CTTTATCATG ATATTTTTAG TAGATTAAGA 1560
        GATGACCAAG GTAGGCCAGT CAATCCCAAC CACTATGCTC TCCAGTGTAC CCATGATGGA 1620
50      AGTATCTTGA TAGTACCCAA AGAACTGGTG GCCTCAGGCC ACAAAAGGA AACCCAAAAG 1680
        GGAAAGAGAA AGTGAGAAGA AACTGAAGAT GGACTCTATT ATGTGAAGTA GTAATGTTCA 1740
        GAAACTGATT ATTTGGATCA GAAACCATTG AAACTGCTTC AAGAATTGTA TCTTTAAGTA 1800
        CTGCTACTTG AATAACTCAG TTAACGCTGT TTTGAAGCTT ACATGGACAA ATGTTTAGGA 1860
        CTTCAAGATC ACACTTGTGG GCAATCTGGG GGAGCCACAA CTTTTCATGA AGTGCATTGT 1920
55      ATACAAAATT CATAGTTATG TCCAAAGAAT AGGTTAACAT GAAAACCCAG TAAGACTTTC 1980
        CATCTTGGCA GCCATCCTTT TTAAGAGTAA GTTGGTTACT TCAAAAAGAG CAAACACTGG 2040
        GGATCAAATT ATTTTAAGAG GTATTTCAGT TTTAAATGCA AAATAGCCTT ATTTTCATTT 2100
        AGTTTGTTAG CACTATAGTG AGCTTTTCAA ACACTATTTT AATCTTTATA TTTAACTTAT 2160
        AAATTTTGCT TTCT                                                   2174
60
        Seq ID NO: C245 Protein Sequence
        Protein Accession #: NP_004433

        1         11        21        31        41        51
65      |         |         |         |         |         |
        MALRRLGAAL LLLPLLAAVE ETLMDSTTAT AELGWMVHPP SGWEEVSGYD ENMNTIRTYQ   60
        VCNVPESSQN NWLRTKFIRR RGAHRIHVEM KFSVRDCSSI PSVPGSCKET FNLYYYEADF  120
        DSATKTFPNW MENPWVKVDT IAADESFSQV DLGGRVMKIN TEVRSFGPVS RSGFYLAFQD  180
        YGGCMSLIAV RVFYRKCPRI IQNGAIFQET LSGAESTSLV AARGSCIANA EEVDVPIKLY  240
70      CNGDGEWLVP IGRCMCKAGF EAVENGTVCR GCPSGTFKAN QGDEACTHCP INSRTTSEGA  300
        TNCVCRNGYY RADLDPLDMP CTTIPSAPQA VISSVNETSL MLEWTPPRDS GGREDLVYNI  360
        ICKSCGSGRG ACTRCGDNVQ YAPRQLGLTE PRIYISDLLA HTQYTFEIQA VNGVTDQSPF  420
        SPQFASVNIT TNQAAPSAVS IMHQVSRTVD SITLSWSQPD QPNGVILDYE LQYYEKELSE  480
75      YNATAIKSPT NTVTVQGLKA GAIYVFQVRA RTVAGYGRYS GKMYFQTMTE AEYQTSIQEK  540
        LPLIIGGSAA GLVFLIAVVV IAIVCNRRRG FERADSEYTD KLQHYTSGHM TPGMKIYIDP  600
        FTYEDPNEAV REFAKEIDIS CVKIEQVIGA GEFGEVCSGH LKLPGKREIF VAIKTLKSGY  660
        TEKQRRDPLS EASIMGQFDH PNVIHLEGVV TKSTPVMIIT EFMENGSLDS PLRQNDGQFT  720
        VIQLVGMLRG IAAGMKYLAD MNYVHRDLAA RNILVNSNLV CKVSDFGLSR FLEDDTSDPT  780
80      YTSALGGKIP IRWTAPEAIQ YRKFTSASDV WSYGIVMWEV MSYGERPYWD MTNQDVINAI  840
        EQDYRLPPPM DCPSALHQLM LDCWQKDRNH RPKFGQIVNT LDKMIRNPNS LKAMAPLSSG  900
        INLPLLDRTI PDYTSFNTVD EWLEAIKMGQ YKESFANAGF TSFDVVSQMM MEDILRVGLT  960
        LAGHQKKILN SIQVMRAQMN QIQSVEV                                      987

        Seq ID NO: C246 Protein Sequence
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Protein Accession #: NP_114148.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MDARRVPQKD LRVKKNLKKF RYVKLISMET SSSSDDSCDS FASDNFANTR LQSVREGCRT    60
     RSQCRHSGPL RVAMKFPARS TRGATNKKAE SRQPSENSVT DSNSDSEDES GMNPLEKRAL   120
     NIKQNKAMLA KLMSELESFP GSFRGRHPLP GSDSQSRRPR RRTFPGVASR RNPERRARPL   180
     TRSRSRILGS LDALPMEEEE EEDKYMLVRK RKTVDGYMNE DDLPRSRRSR SSVTLPHIIR   240
     PVEEITEGGV GERLQQFSKR RYITVHWALL VINAVRRLLI PKQTAETQTA GAFEASSVAP   300
     AFETVMVKRS GMLCWIRTGI ARLVEESATA VSAGSEMDGV RLGSLCI                 347
```

Seq ID NO: C247 Protein Sequence
Protein Accession #: NP_036577.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MENPSPAAAL GKALCALLLA TLGAAGQPLG GESICSARAP AKYSITFTGK WSQTAFPKQY    60
     PLFRPPAQWS SLLGAAHSSD YSMWRKNQYV SNGLRDPAER GEAWALMKEI EAAGEALQSV   120
     HAVFSAPAVP SGTGQTSAEL EVQRRHSLVS FVVRIVPSPD WFVGVDSLDL CDGDRWREQA   180
     ALDLYPYDAG TDSGFTFSSP NFATIPQDTV TEITSSSPSH PANSFYYPRL KALPPIARVT   240
     LVRLRQSPRA FIPPAPVLPS RDNEIVDSAS VPETPLDCEV SLWSSWGLCG GHCGRLGTKS   300
     RTRYVRVQPA NNGSPCPELE EEAECVPDNC V                                 331
```

Seq ID NO: C248 Protein Sequence
Protein Accession #: NP_063947.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MLQDPDSDQP LNSLDVKPLR KPRIPMETFR KVGIPIIIAL LSLASIIIVV VLIKVILDKY    60
     YFLCGQPLHF IPRKQLCDGE LDCPLGEDEE HCVKSPPEGP AVAVRLSKDR STLQVLDSAT   120
     GNWFSACFDN FTEALAETAC RQMGYSSKPT FRAVEIGPDQ DLDVVEITEN SQELRMRNSS   180
     GPCLSGSLVS LHCLACGKSL KTPRVVGGEE ASVDSWPWQV SIQYDKQHVC GGSILDPHWV   240
     LTAAHCFRKH TDVFNWKVRA GSDKLGSFPS LAVAKIIIIE FNPMYPKDND IALMKLQFPL   300
     TFSGTVRPIC LPFFDEELTP ATPLWIIGWG PTKQNGGKMS DILLQASVQV IDSTRCNADD   360
     AYQGEVTEKM MCAGIPEGGV DTCQGDSGGP LMYQSDQWHV VGIVSWGYGC GGPSTPGVYT   420
     KVSAYLNWIY NVWKAEL                                                 437
```

Seq ID NO: C249 Protein Sequence
Protein Accession #: NP_003036.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MGCKVLLNIG QQMLRRKVVD CSREETRLSR CLNTFDLVAL GVGSTLGAGV YVLAGAVARE    60
     NAGPAIVISF LIAALASVLA GLCYGEFGAR VPKTGSAYLY SYVTVGELWA FITGWNLILS   120
     YIIGTSSVAR AWSATFDELI GRPIGEFSRT HMTLNAPGVL AENPDIFAVI IILILTGLLT   180
     LGVKESAMVN KIFTCINVLV LGPIMVSGFV KGSVKNWQLT EEDFGNTSGR LCLNNDTKEG   240
     KPGVGGFMPF GFSGVLSGAA TCFYAFVGFD CIATTGEEVK NPQKAIPVGI VASLLICFIA   300
     YFGVSAALTL MMPYFCLDNN SPLPDAFKHV GWEGAKYAVA VGSLCALSAS LLGSMFPMPR   360
     VIYAMAEDGL LPKFLANVND RTKTPIIATL ASGAVAAVMA FLFDLKDLVD LMSIGTLLAY   420
     SLVAACVLVL RYQPEQPNLV YQMASTSDEL DPADQNELAS TNDSQLGFLP EAEMFSLKTI   480
     LSPKNMEPSK ISGLIVNIST SLIAVLIITF CIVTVLGREA LTKGALWAVP LLAGSALLCA   540
     VVTGVIWRQP ESKTKLSFKV PFLPVLPILS IFVNVYLMMQ LDQGTWVRFA VWMLIGFIIY   600
     FGYGLWHSEE ASLDADQART PDGNLDQCK                                    629
```

Seq ID NO: C250 Protein Sequence
Protein Accession #: NP_002767.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MRAPHLHLSA ASGARALAKL LPLLMAQLWA AEAALLPQND TRLDPEAYGA PCARGSQPWQ    60
     VSLFNGLSFH CAGVLVDQSW VLTAAHCGNK PLWARVGDDH LLLLQGEQLR RTTRSVVHPK   120
     YHQGSGPILP RRTDEHDLML LKLARPVVPG PRVRALQLPY RCAQPGDQCQ VAGWGTTAAR   180
     RVKYNKGLTC SSITILSPKE CEVFYPGVVT NNMICAGLDR GQDPCQSDSG GPLVCDETLQ   240
     GILSWGVYPC GSAQHPAVYT QICKYMSWIN KVIRSN                            276
```

Seq ID NO: C251 Protein Sequence
Protein Accession #: XP_095088.3

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MTRAATAEPG RVSPASPARS TAGLPRAFLQ SLRTLLDILD DWQRGCVHLR EIQSLWVEAR    60
     ELPSGVLEGL SQRRGPQPGA AVRSRRGGAV PRGARAVPER CAGTETRRGR RCSGLQRLGG   120
     GFRGCPADPC ARGEHRRHTI TSGVDCGLLK QMKELEQEKE VLLQGLEMMA QGRDWYQQQL   180
     QQVQERQCRL GQSRASADFG AVGGSPRPLGR LLPKVQEVAR WLGELLLAEAC AGRALPTSSS   240
     GPPCSALTST SSPGWQQQII LMLKEQNRLL TQEVTEKSER ITQLEQKSAL IKQLFEARAL   300
     SQQDGGLSPA GPHIEPLTRF RLPVLTWAGA LLSPHSPQLL LPLSADSGGP LHELPDTWFP   360
     AVLLWVPSPG KRTAHARLHF HQRPAEGAWQ LGCGAEAAPE TCGTLPHFES HKTTCEPDSL   420
     GGPCPQEGDR SWSHLGAAFD VAPAVAKVTP NREDAAGSRH GDICPLCPKG LLTFRDIAIE   480
     FSLAEWQCLD HAQQNLYRDV MLENYRNLFS LGMTVSKPDL IACLEQNKEP QNIKRNEMAA   540
     KHPVTCSHFN QDLQPEQSIK DSLQKVIPRT YGKCGHENLQ LKKCCKRVDE CEVHKGGYND   600
     LNQCLSNTQN KIFQTHKCVK VFSKFSNSNR HNARYTGKKH LKCKKYGKSF CMFSHLNQHQ   660
     IIHTKEKSYK CEECGKSFNH SSSGTTHKRI LTGEKPYRCE ECGKAFRWPS NLTRHKRIHT   720
     GEKPYACEEC GQAFRRSSTL TNHKRIHTGE RPYKCEECGK AFSVSSALIY HKRIHTGEKP   780
     YTCEECGKAF NCSSTLKTHK IIHTGEKPYT CEECGRTFNC SSTVKAHKRI HTGEKPYKCE   840
```

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     ECDKAFKWHS  SLAKHKIIHT  GEKPYKCSDS  KALAKSSEVQ  KVYSGDGENG  IRVHKKKETQ    900
     GWLVRNKNEN  RTGLFQIRAA  VRPNRDPSWG  QQEGSLTDPI  QRKEEPDLQN  HYDHQNALED    960
     QRNTGVGGLL  TFRDVVIEFS  LEEWQCLDHA  QQNLYRDVML  ENYRNLVSLG  IAVSKPDLIT   1020
     CLEQNKEPWN  IKRNEMVTKH  PDLPPELGIK  DSLQKVIPRR  YGKSGHDNLQ  VKTCKSMGBC   1080
     EVQKGGCNEV  NQCLSTTQNK  IPQTHKCVKV  FGKFSNSNRH  KTRHTGKKHF  KCKKYGKSFC   1140
     MVSQLHQHQI  IHTRENSYQC  EECGKPFNCS  STLSKHKRIH  TGEKPYRCEE  CGKAFTWSST   1200
     LTKHRRIHTG  EKPYTCEECG  QAFSRSSTLA  NHKRIHTGEK  PYTCEECGKA  FSLSSSLTYH   1260
     KRIHTGEKPY  TCEECGKAFN  CSSTLKKHKI  IHTGEKPYKC  KECGKAPAFS  STLNTHKRIH   1320
     TGEEPYKCEE  CDKAFKWSSS  LANHKSMHTG  EKPYKCE                              1357
```

Seq ID NO: C252 Protein Sequence
Protein Accession #: NP_114433.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MASRSMRLLL  LLSCLAKTGV  LGDIIMRPSC  APGWFYHKSN  CYGYFRKLRN  WSDAELECQS    60
     YGNGAHLASI  LSLKEASTIA  EYISGYQRSQ  PIWIGLHDPQ  KRQQWQWIDG  AMYLYRSWSG   120
     KSMGGNKHCA  EMSSNNNFLT  WSSNECNKRQ  HFLCKYRP                             158
```

Seq ID NO: C253 Protein Sequence
Protein Accession #: XP_051860.2

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MDGVNLSTEV  VYKKGQDYRF  ACYDRGRACR  SYRVRFLCGK  PVRPKLTVTI  DTNVNSTILN    60
     LEDNVQSWKP  GDTLVIASTD  YSMYQAEEFQ  VLPCRSCAPN  QVKVAGKPMY  LHIGEEIDGV   120
     DMRAEVGLLS  RNIIVMGEME  DKCYPYRNHI  CNFFDFDTFG  GHIKFALGFK  AAHLEGTELK   180
     HMGQQLVGQY  PIHPHLAGDV  DERGGYDPPT  YIRDLSIHHT  FSRCVTVHGS  NGLLIKDVVG   240
     YNSLGHCFFT  EDGPEERNTP  DHCLGLLVKS  GTLLPSDRDS  KMCKMITGDS  YPGYIPKPRQ   300
     DCNAVSTFWM  ANPNNNLINC  AAAGSEETGF  WFIFHHVPTG  PSVGMYSPGY  SEHIPLGKFY   360
     NNRAHSNYRA  GMIIDNGVKT  TEASAKDKRP  FLSIISARYS  PHQDADPLKP  REPAIIRHFI   420
     AYKNQDHGAW  LRGGDVWLDS  CRFADNGIGL  TLASGGTFPY  DDGSKQEIKN  SLFVGESGNV   480
     GTEMMDNRIW  GPGGLDHSGR  TLPIGQNFPI  RGIQLYDGPI  NIQNCTFRKF  VALEGRHTSA   540
     LAFRLNNAWQ  SCPHNNVTGI  APEDVPITSR  VFFGEPGPWF  NQLDMDGDKT  SVFHDVDGSV   600
     SEYPGSYLTK  NDNWLVRHPD  CINVPDWRGA  ICSGCYAQMY  IQAYKTSNLR  MKIIKNDFPS   660
     HPLYLEGALT  RSTHYQQYQP  VVTLQKGYTI  HWDQTAPAEL  AIWLINFNKG  DWIRVGLCYP   720
     RGTTPSILSD  VHNRLLKQTS  KTGVPVRTLQ  MDKVEQSYPG  RSHYYWDEDS  GLLFLKLKAQ   780
     NEREKPAPCS  MKGCERIKIK  ALIPKNAGVS  DCTATAYPKF  TERAVVDVPM  PKKLFGSQLK   840
     TKDHPLEVKM  ESSKQHFFHL  WNDFAYIEVD  GKKYPSSEDG  IQVVVIDGNQ  GRVVSHTSFR   900
     NSILQGIPWQ  LFNYVATIPD  NSIVLMASKG  RYVSRGPWTR  VLEKLGADRG  LKLKEQMAFV   960
     GPKGSFRPIW  VTLDTEDHKA  KIFQVVPIPV  VKKKKL                              996
```

Seq ID NO: C254 Protein Sequence
Protein Accession #: NP_055188.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MTALSSENCS  FQYQLRQTNQ  PLDVNYLLFL  IILGKILLNI  LTLGMRRKNT  CQNFMEYFCI    60
     SLAFVDLLLL  VNISIILYFR  DFVLLSIRFT  KYHICLFTQI  ISFTYGFLHY  PVFLTACIDY   120
     CLNFSKTTKL  SFKCQKLFYF  FTVILIWISV  LAYVLGDPAI  YQSLKAQNAY  SRHCPFYVSI   180
     QSYWLSFFMV  MILFVAPITC  WEEVTTLVQA  IRITSYMNET  ILYFPFSSHS  SYTVRSKKIF   240
     LSKLIVCFLS  TWLPPVLLQV  IIVLLKVQIP  AYIEMNIPWL  YFVNSFLIAT  VYWFNCHKLN   300
     LKDIGLPLDP  FVNWKCCFIP  LTIPNLEQIE  KPISIMIC                            338
```

Seq ID NO: C255 Protein Sequence
Protein Accession #: Eos sequence

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MALVLGSLLL  LGLCGNSPSG  GQPSSTDAPK  AWNYELPATN  YETQDSHKAG  PIGILFELVH    60
     IFLYVVQPRD  FPEDTLRKPL  QKAYESKIDY  DKIVYYEAGI  ILCCVLGLLF  IILMPLVGYF   120
     FCMCRCCNKC  GGEMHQRQKE  NGPFLRKCFA  ISLLVICIII  SIGIFYGFVA  NHQVRTRIKR   180
     SRKLADSNFK  DLRTLLNETP  EQIKYILAQY  NTTKDKAFTD  LNSINSVLGG  GILDRLRPNI   240
     IPVLDEIKSM  ATAIKETKEA  LENMNSTLKS  LHQQSTQLSS  SLTSVKTSLR  SSLNDPLCLV   300
     HPSSETCNSI  RLSLSQLNSN  PELRQLPPVD  ABLDNVNNVL  RTDLDGLVQQ  GYQSLNDIPD   360
     RVQRQTTTVV  AGIKRVLNSI  GSDIDNVTQR  LPIQDILSAF  SVYVNNTESY  IHRNLPTLEE   420
     YDSYWWLGGL  VICSLLTLIV  IFYYLGLLCG  VCGYDRHATP  TTRGCVSNTG  GVFLMVGVGL   480
     SFLFCWILMI  IVVLTFVFGA  NVEKLICEPY  TSKELFRVLD  TPYLLNEDWE  YYLSGKLFNK   540
     SKMKLTFEQV  YSDCKKNRGT  YGTLHLQNSF  NISEHLNINE  HTGSISSELE  SLKVNLNIFL   600
     LGAAGRKNLQ  DPAACGIDRM  NYDSYLAQTG  KSPAGVNLLS  FAYDLEAKAN  SLPPGNLRNS   660
     LKRDAQTIKT  IHQQRVLPIE  QSLSTLYQSV  KILQRTGNGL  LERVTRILAS  LDFAQNFITN   720
     NTSSVIIEET  KKYGRTIIGY  FEHYLQWIEF  SISEKVASCK  PVATALDTAV  DVFLCSYIID   780
     PLNLFWFGIG  KATVFLLPAL  IFAVKLAKYY  RRMDSEDVYD  DVETIPMKNM  ENGNNGYHKD   840
     HVYGIHNPVM  TSPSQH                                                       856
```

Seq ID NO: C256 Protein Sequence
Protein Accession #: NP_149038.1

```
     1          11         21         31         41         51
     |          |          |          |          |          |
     MKAIIHLTLL  ALLSVNTATN  QGNSADAVTT  TETATSGPTV  AAADTTETNP  PETASTTANT    60
     PSFPTATSPA  PPIISTHSSS  TIPTPAPPII  STHSSSTIPI  PTAADSESTT  NVNSLATSDI   120
     ITASSPNDGL  ITMVPSETQS  NNEMSPTTED  NQSSGPPTGT  ALLETSTLNS  TGPSNPCQDD   180
     PCADNSLCVK  LHNTSFCLCL  EGYYYNSSTC  KKGKVFPGKI  SVTVSETFDP  EEKHSMAYQD   240
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LHSEITSLFK DVFGTSVYGQ TVILTVSTSL SPRSEMRADD KFVNVTIVTI LAETTSDNEK  300
TVTEKINKAI RSSSSNFLNY DLTLRCDYYG CNQTADDCLN GLACDCKSDL QRPNPQSPFC  360
VASSLKCPDA CNAQHKQCLI KKSGGAPECA CVPGYQEDAN GNCQKCAFGY SGLDCKDKFQ  420
LILTIVGTIA GIVILSMIIA LIVTARSNNK TKHIEEENLI DEDFQNLKLR STGFTNLGAE  480
GSVFPKVRIT ASRDSQMQNP YSRHSSMPRP DY                                512
```

Seq ID NO: C257 Protein Sequence
Protein Accession #: NP_001423.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MTAGRRMEML CAGRVPALLL CLGFHLLQAV LSTTVIPSCI PGESSDNCTA LVQTEDNPRV  60
AQVSITKCSS DMNGYCLHGQ CIYLVDMSQN YCRCEVGYTG VRCEHFFLTV HQPLSKEYVA  120
LTVILIILFL ITVVGSTYYF CRWYRNRKSK EPKKEYERVT SGDPELPQV              169
```

Seq ID NO: C258 Protein Sequence
Protein Accession #: AAC63902.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MDRSKENCIS GPVKATAPVG GPKRVLVTQQ IPCQNPLPVN SGQAQRVLCP SNSSQRVPLQ  60
AQKLVSSHKP VQNQKQKQLQ ATSVPHPVSR PLNNTQKSKQ PLPSAPENNP EEELASKQKN  120
EESKKRQWAL EDFEIGRPLG KGKFGNVYLA REKQSKFILA LKVLFKAQLE KAGVEHQLRR  180
EVEIQSHLRH PNILRLYGYF HDATRVYLIL EYAPLGTVYR ELQKLSKFDE QRTATYITEL  240
ANALSYCHSK RVIHRDIKPE NLLLGSAGEL KIADFGWSVH APSSRRTTLC GTLDYLPPEM  300
IEGRMHDEKV DLWSLGVLCY EFLVGKPPFE ANTYQETYKR ISRVEFTFPD FVTEGARDLI  360
SRLLKHNPSQ RPMLREVLEH PWITANSSKP SNCQNKESAS KQS                   403
```

Seq ID NO: C259 Protein Sequence
Protein Accession #: NP_037504.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MSRTAYTVGA LLLLLGTLLP AAEGKKKGSQ GAIPPPDKAQ HNDSEQTQSP QQPGSRNRGR  60
GQGRGTAMPG EEVLESSQEA LHVTERKYLK RDWCKTQPLK QTIHEEGCNS RTIINRFCYG  120
QCNSFYIPRH IRKEEGSFQS CSFCKPKKFT TMMVTLNCPE LQPPTKKKRV TRVKQCRCIS  180
IDLD                                                               184
```

Seq ID NO: C260 Protein Sequence
Protein Accession #: Eos sequence

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1          11         21         31         41         51
|          |          |          |          |          |
MKVGVLWLIS FFTFTDGHGG FLGKNDGIKT KKELIVNKKK HLGPVEEYQL LLQVTYRDSK  60
EKRDLRNFLK LLKPPLLWSH GLIRIIRAKA TTDCNSLNGV LQCTCEDSYT WFPPSCLDPQ  120
NCYLHTAGAL PSCECHLNNL SQSVNFCERT KIWGTFKINE RPTNDLLNSS SAIYSKYANG  180
IEIQLKKAYE RIQGFESVQV TQFRNGSIVA GYEVVGSSSA SELLSAIEHV AEKAKTALHK  240
LFPLEDGSFR VFGKAQCNDI VFGFGSKDDE YTLPCSSGYR GNITAKCESS GWQVIRETCV  300
LSLLEELNKN FSMIVGNATE AAVSSFVQNL SVIIRQNPST TVGNLASVVS ILSNISSLSL  360
ASHFRVSNST MEDVISIADN ILNSASVTNW TVLLREEKYA SSRLLETLEN ISTLVPPTAL  420
PLNFSRKPID WKGIPVNKSQ LKRGYSYQIK MCPQNTSIPI RGRVLIGSDQ FQRSLPETII  480
SMASLTLGNI LPVSKNGNAQ VNGPVISTVI QNYSINEVPL PFSKIESNLS QPHCVFWDFS  540
HLQWNDAGCH LVNETQDIVT CQCTHLTSFS ILMSPFVPST IFPVVKWITY VGLGISIGSL  600
ILCLIIEALF WKQIKKSQTS HTRRICMVNI ALSLLIADVW FIVGATVDTT VNPSGVCTAA  660
VFFTHFFYLS LFFWMLMLGI LLAYRIILVF HHMAQHLMMA VGFCLGYGCP LIISVITIAV  720
TQPSNTYKRK DVCWLNWSNG SKPLLAFVVP ALAIVAVNFV VVLLVLTKLW RPTVGERLSR  780
DDKATIIRVG KSLLILTPLL GLTWGFGIGT IVDSQNLAWH VIFALLNAFQ GPFILCFGIL  840
LDSKLRQLLP NKLSALSSWK QTEKQNSSDL SAKPKPSKPF NPLQNKGHYA FSHTGDSSDN  900
IMLTQFVSNE                                                         910
```

Seq ID NO: C261 Protein Sequence
Protein Accession #: NP_000575.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MTSKLAVALL AAFLISAALC EGAVLPRSAK ELRCQCIKTY SKPFHPKFIK ELRVIESGPH  60
CANTEIIVKL SDGRELCLDP KENWVQRVVE KFLKRAENS                         99
```

Seq ID NO: C262 Protein Sequence
Protein Accession #: NP_005594.1

```
1          11         21         31         41     .    51
|          |          |          |          |          |
MSTERDSETT FDEDSQPNDE VVPYSDDETE DELDDQGSAV EPEQNRVNRE AEENREPFRK  60
ECTWQVKAND RKYHEQPHFM NTKFLCIKES KYANNAIKTY KYNAFTFIPM NLFEQFKRAA  120
NLYFLALLIL QAVPQISTLA WYTTLVPLLV VLGVTAIKDL VDDVARHKMD KEINNRTCEV  180
IKDGRFKVAK WKEIQVGDVI RLKKNDFVPA DILLLSSSEP NSLCYVETAE LDGETNLKFK  240
MSLEITDQYL QREDTLATFD GFIECEEPNN RLDKFTGTLF WRNTSPPLDA DKILLRGCVI  300
RNTDFCHGLV IFAGADTKIM KNSGKTRFKR TKIDYLMNYM VYTIFVVLIL LSAGLAIGHA  360
YWEAQVGNSS WYLYDGEDDT PSYRGFLIFW GYIIVLNTMV PISLYVSVEV IRLGQSHFIN  420
WDLQMYYAEK DTPAKARTTT LNEQLGQIHY IFSDKTGTLT QNIMTFKKCC INGQIYGDHR  480
DASQHNHNKI EQVDFSWNTY ADGKLAPYDH YLIEQIQSGK EPEVRQFFFL LAVCHTVMVD  540
RTDGQLNYQA ASPDEGALVN AARNFGFAPL ARTQNTITIS ELGTERTYNV LAILDFNSDR  600
KRMSIIVRTP EGNIKLYCKG ADTVIYERLH RMNPTKQETQ DALDIFANET LRTLCLCYKE  660
```

1345

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        IEEKEFTEWN KKFMAASVAS TNRDEALDKV YEEIEKDLIL LGATAIEDKL QDGVPETISK   720
        LAKADIKIWV LTGDKKETAE NIGFACELLT EDTTICYGED INSLLHARME NQRNRGGVYA   780
        KFAPPVQESP FPPGGNRALI ITGSWLNEIL LEKKTKRNKI LKLKFPPRTEE ERRMRTQSKR   840
        RLEAKKEQRQ KNFVDLACEC SAVICCRVTP KQKAMVVDLV KRYKKAITLA IGDGANDVNM    900
   5    IKTAHIGVGI SGQEGMQAVM SSDYSFAQFR YLQRLLLVHG RWSYIRMCKF LRYFFYKNFA    960
        FTLVHFWYSF FNGYSAQTAY EDWFITLYNV LYTSLPVLLM GLLDQDVSDK LSLRFPGLYI  1020
        VGQRDLLFNY KRFFVSLLHG VLTSMILFFI PLGAYLQTVG QDGEAPSDYQ SFAVTIASAL  1080
        VITVNFQIGL DTSYWTFVNA FSIFGSIALY FGIMFDFHSA GIHVLFPSAF QFTGTASNAL  1140
        RQPYIWLTII LTVAVCLLPV VAIRFLSMTI WPSESDKIQK HRKRLKAEEQ WQRRQQVFRR  1200
   10   GVSTRRSAYA FSHQRGYADL ISSGRSIRKK RSPLDAIVAD GTAEYRRTGD S            1251

        Seq ID NO: C263 Protein Sequence
        Protein Accession #: XM_044533

   15   1          11         21         31         41         51
        |          |          |          |          |          |
        MLRTAMGLRS WLAAPWGALP PRPPLLLLLL LLLLLQPPPP TWALSPRISL PLGSEERPFL   60
        RPEAEHISNY TALLLSRDGR TLYVGAREAL FALSSNLSFL PGGEYQELLW GADAEKKQQC  120
        SFKGKDPQRD CQNYIKILLP LSGSHLFTCG TAAFSPMCTY INMENFTLAR DEKGNVLLED  180
   20   GKGRCPFDPN PKSTALVVDG ELYTGTVSSF QGNDPAISRS QSLRPTKTES SIANWLQDPAF  240
        VASAYIPESL GSLQGDDDKI YPFFSETGQE FEFFENTIVS RIARICKGDE GGERVLQQRW  300
        TSFLKAQLLC SRPDDGFPFN VLQDVFTLSP SPQDWRDTLF YGVFTSQWHR GTTEGSAVCV  360
        FTMKDVQRVF SGLYKEVNRE TQQWYTVTHP VPTPRPGACI TNSARERKIN SSLQLPDRVL  420
        NFLKDHFLMD GQVRSRMLLL QPQARYQRVA VHRVPGLHHT YDVLFLGTGD GRLHKAVSVG  480
   25   PRVHIIEELQ IFSSGQPVQN LLLDTHRGLL YAASHSGVVQ VPMANCSLYR SCGDCLLARD  540
        PYCAWSGSSC KHVSLYQPQL ATRPWIQDIE GASAKDLCSA SSVVSPSFVP TGEKPCEQVQ  600
        FQPNTVNTLA CPLLSNLATR LWLRNGAPVN ASASCHVLPT GDLLLVGTQQ LGEFQCWSLE  660
        EGFQQLVASY CPEVVEDGVA DQTDEGGSVP VIISTSRVSA PAGGKASWGA DRSYWKEFLV  720
        MCTLFVLAVL LPVLFLLYRH RNSMKVFLKQ GECASVHPKT CPVVLPPETR PLNGLGPPST  780
   30   PLDHRGYQSL SDSPPGSRVF TESEKRPLSI QDSFVEVSPV CPRPRVRLGS EIRDSVV      837

        Seq ID NO: C264 Protein Sequence
        Protein Accession #: NP_008950.1

   35   1          11         21         31         41         51
        |          |          |          |          |          |
        MASQNRDPAA TSVAAARKGA EPSGGAARGP VGKRLQQELM TLMMSGDKGI SAFPESDNLF   60
        KWVGTIHGAA GTVYEDLRYK LSLEFPSGYP YNAPTVKFLT PCYHPNVDTQ GNICLDILKE  120
   40   KWSALYDVRT ILLSIQSLLG EPNIDSPLNT HAAELWKNPT AFKKYLQETY SKQVTSQEP   179

        Seq ID NO: C265 Protein Sequence
        Protein Accession #: NP_055399.1

   45   1          11         21         31         41         51
        |          |          |          |          |          |
        MGRGWGFLFG LLGAVWLLSS GHGEEQPPET AAQRCFCQVS GYLDDCTCDV ETIDRFNNYR   60
        LFPRLQKLLE SDYFRYYKVN LKRPCPFWND ISQCGRRDCA VKPCQSDEVP DGIKSASYKY  120
        SEEANNLIEE CEQAERLGAV DESLSEETQK AVLQWTKHDD SSDNPCEADD IQSPEABYVD  180
   50   LLLNPERYTG YKGPDAWKIW NVIYEENCFK PQTIKRPLNP LASGQGTSEE NTFYSWLEGL  240
        CVEKRAFYRL ISGLHASINV HLSARYLLQE TWLEKKWGHN ITEPQQRFDG ILTEGEGPRR  300
        LKNLYFLYLI ELRALSKVLP FFERPDFQLF TGNKIQDEEN KMLLLEILHE IKSPPLHFDB  360
        NSFFAGDKKE AHKLKEDFRL HFRNISRIMD CVGCFKCRLW GKLQTQGLGT ALKILFSEKL  420
        IANMPESGPS YEFHLTRQEI VSLFNAFGRI STSVKELENF RNLLQNIH              468
```

Seq ID NO: C266 Protein Sequence
Protein Accession #: NP_002879.1

```
   60   1          11         21         31         41         51
        |          |          |          |          |          |
        MQPRRQRLPA PWSGPRGPRP TAPLLALLLL LAPVAAPAGS GGPDDPGQPQ DAGVPRRLLQ   60
        QKARAALHPF NFRSGSPSAL RVLAEVQBGR AWINPKEGCK VHVVFSTERY NPESLLQEGE  120
        GRLGKCSARV FFKNQKPRPT INVTCTRLIE KKKRQQEDYL LYKQMKQLKN PLEIVSIPDN  180
        HGHIDPSLRL IWDLAFLGSS YVMWEMTTQV SHYYLAQLTS VRQWVRKT              228
```

Seq ID NO: C267 Protein Sequence
Protein Accession #: NP_005400.1

```
   70   1          11         21         31         41         51
        |          |          |          |          |          |
        MSVKGMAIAL AVILCATVVQ GPPMFKRGRC LCIGPGVKAV KVADIEKASI MYPSNNCDKI   60
        EVIITLKENK GQRCLNPKSK QARLIIKKVE RKNF                            94
```

Seq ID NO: C268 Protein Sequence
Protein Accession #: FGENESH predicted

```
   75   1          11         21         31         41         51
        |          |          |          |          |          |
        MLRQVLRRGL QSFCHRLGLC VSRHPVFFLT VPAVLTITFG LSALNRFQPE GDLERLVAPS   60
   80   HSLAKIERSL ASSLFPLDQS KSQLYSDLHT PGRYGRVILL SPTGDNILLQ AEGILQTHRA  120
        VLEMKVNHKG YNYTFSHLCV LRNQDKKCVL DDIISVLEDL RQAAVSNKTT ARVQVRYPNT  180
        KLKVCSFCML LPIKEAALHP LP                                        202
```

Seq ID NO: C269 Protein Sequence
Protein Accession #: NP_002429.1

```
       1         11        21        31        41        51
       |         |         |         |         |         |
 5     MRLPLLLVFA SVIPGAVLLL DTRQFLIYNE DHKRCVDAVS PSAVQTAACN QDAESQKFRW    60
       VSESQIMSVA FKLCLGVPSK TDWVAITLYA CDSKSEFQKW ECKNDTLLGI KGEDLFFNYG   120
       NRQEKNIMLY KGSGLWSRWK IYGTTDNLCS RGYEAMYTLL GNANGATCAF PFKFENKWYA   180
       DCTSAGRSDG WLWCGTTTDY DTDKLFGYCP LKFEGSESLW NKDPLTSVSY QINSKSALTW   240
       HQARKSCQQQ NAELLSITEI HEQTYLTGLT SSLTSGLWIG LNSLSFNSGW QWSDRSPFRY   300
10     LNWLPGSPSA EPGKSCVSLN PGKNAKWENL ECVQKLGYIC KKGNTTLNSF VIPSESDVPT   360
       HCPSQWWPYA GHCYKIHRDE KKIQRDALTT CRKEGGDLTS IHTIEELDPI ISQLGYEPND   420
       ELWIGLNDIK IQMYFEWSDG TPVTFTKWLR GEPSHENNRQ EDCVVMKGKD GYWADRGCEW   480
       PLGYICKMKS RSQGPEIVEV EKGCRKGWKK HHFYCYMIGH TLSTFAEANQ TCNNENAYLT   540
       TIEDRYEQAF LTSFVGLRPE KYFWTGLSDI QTKGTFQWTI EEEVRFTHWN SDMPGRKPGC   600
15     VAMRTGIAGG LWDVLKCDEK AKFVCKHWAE GVTHPPKPTT TPEPKCPEDW GASSRTSLCF   660
       KLYAKGKHEK KTWFESRDFC RALGGDLASI NNKEEQQTIW RLITASGSYH KLFWLGLTYG   720
       SPSEGFTWSD GSPVSYENWA YGEPNNYQNV EYCGELKGDP TMSWNDINCE HLNNWICQIQ   780
       KGQTPKPEPT PAPQDNPPVT EDGWVIYKDY QYYFSKEKET MDNARAFCKR NFGDLVSIQS   840
       ESEKKFPLWKY VNRNDAQSAY PIGLLISLDK KFAWMDGSKV DYVSWATGEP NFANEDENCV   900
20     TMYSNSGFWN DINCGYPNAF ICQRHNSSIN ATTVMPTMPS VPSGCKEGWN FYSNKCFKIF   960
       GFMEEERKNW QEARKACIGF GGNLVSIQNE KEQAFLTYHM KDSTFSAWTG LNDVNSEHTF  1020
       LWTDGRGVHY TNWGKGYPGG RRSSLSYEDA DCVVIIGGAS NEAGKWMDDT CDSKRGYICQ  1080
       TRSDPSLTNP PATIQTDGFV KYGKSSYSLM RQKFQWHEAE TYCKLHNSLI ASILDPYSNA  1140
       FAWLQMETSN ERVWIALNSN LTDNQYTWTD KWRVRYTNWA ADEPKLKSAC VYLDLDGYWK  1200
       TAHCNESFYF LCKRSDEIPA TEPPQLPGRC PESDHTAWIP FHGHCYYIES SYTRNWGQAS  1260
25     LECLRMGSSL VSIESAAESS FLSYRVEPLK SKTNFWIGLP RNVEGTWLWI NNSPVSFVNW  1320
       NTGDPSGERN DCVALHASSG FWSNIHCSSY KGYICKRPKI IDAKPTHELL TTKADTRKMD  1380
       PSKPPSSNVAG VVIIVILLIL TGAGLAAYFF YKKRRVHLPQ EGAFENTLYP NSQSSPGTSD  1440
       MKDLVGNIEQ NEHSVI                                                  1456
```

30   Seq ID NO: C270 Protein Sequence
       Protein Accession #: Eos sequence

```
       1         11        21        31        41        51
       |         |         |         |         |         |
35     MVLLHWCLLW LLFPLSSRTQ KLPTRDEELF QMQIRDKAFF HDSSVIPDGA EISSYLFRDT    60
       PKRYFVVEE DNTPLSVTVT PCDAPLEWKL SLQELPEDRS GEGSGDLEPL EQQKQQIINE   120
       EGTELFSYKG NDVEYFISSS SPSGLYQLDL LSTEKDTHFK VYATTTPESD QPYPELPYDP   180
       RVDVTSLGRT TVTLAWKPSP TASLLKQPIQ YCVVINKEHN FKSLCAVEAK LSADDAFMMA   240
       PKPGLDFSPF DFAHFGFPSD NSGKERSFQA KPSPKLGRHV YSRPKVDIQK ICIGNKNIFT   300
40     VSDLKPDTQY YFDVFVVNIN SNMSTAYVGT FARTKEEAKQ KTVELKDGKI TDVFVKRKGA   360
       KFLRFAPVSS HQKVTFFIHS CLDAVQIQVR RDGKLLLSQN VEGIQQFQLR GKPKAKYLVR   420
       LKGNKKGASM LKILATTRPT KQSFPSLPED TRIKAFDKLR TCSSATVAWL GTQERNKFCI   480
       YKKEVDDNYN EDQKKREQNQ CLGPDIRKKS EKVLCKYFHS QNLQKAVTTE TIKGLQPGKS   540
       YLLDVYVIGH GGHSVKYQSK VVKTRKFC                                      568
```

       Seq ID NO: C271 Protein Sequence
       Protein Accession #: AAH34229.1

```
       1         11        21        31        41        51
       |         |         |         |         |         |
50     MEKVQLEFEN QEMEKKLQEF RSTRNKEKED RESSEYYWKS GKVGKLVNQS YMMSQNKGNV    60
       VKFSAGKVKL KLLKEQIQEP VKPTVNYKMA NSSECEKPKI NGKVCGQCEN KAALLVCLEC   120
       GEDYCSGCFA NVHQKGALKL HRTTLLQARS QILFNVLDVA HQFIKDVNPD EPKEENNSTK   180
       ETSKIQHKPK SVLLQRSSSE VEITTMKRAQ RTKPRKSLLC EGSFDEEASA QSFQEVLSQW   240
55     RTGNHDDNKK QNLHAAVKDS LEECEVQTNL KIWREPLNIE LKEDILSYME KLWLKKHRRT   300
       PQEQLFKCYQ IRSHIHMKPL VMHSVLKMKT MKIVMVRRPK YNTQLFYCQ               349
```

       Seq ID NO: C272 Protein Sequence
60   Protein Accession #: NP_078963.1

```
       1         11        21        31        41        51
       |         |         |         |         |         |
65     MEKLWLKKHR RTPQEQLFKM LSDTFPHPHB TTGDAQCSQN ENDEDSDGEE TKVQHTALLL    60
       PVETLNIERP EPSLKIVELD DTYEEEFEEA ENIVPYKVKL ADADSQRSCA FHDCQKNSFP   120
       YENGIHQHHV FDKGKRDFLN LCLRNSSTYY KDNSKGETSN TDFDNIVDPD VYSSDIEKIE   180
       ESTSFERNLK EKNIGLESNQ KSDDSCVSLE SKDTLLGRDL EKAPIEEKLS QDIKESLELS   240
       NLYKRPSPEE SKTTKSSLLL QEIACRSKPI TKQYQGLERF FIFDTNERLN LLPSHRLECN   300
       NSSTRITLAE DREWIPDHSL SEYADNAIVL GVLQGAQSPS SSRKQQKMGQ KSQRPSTANF   360
       PLSNSVKESS SCLSSSHPRS RSAAAQSSSR AASEISEIEY IDITDQNELS LDDTTDQHTL   420
70     DNLEKELQVL RSLADTSEKL YSLTSEEFPD FSSQSLNISQ ISTDPLKTSH VRGPCGVEEL   480
       SCSGRDTKIQ SLLSLSESST DEEEEDPLNK QHVITLPWSK ST                      522
```

       Seq ID NO: C273 Protein Sequence
75   Protein Accession #: NP_005399.1

```
       1         11        21        31        41        51
       |         |         |         |         |         |
       MKVSAVLLCL LLMTAAFNPQ GLAQPDALNV PSTCCPTPSS KKISLQRLKS YVITTSRCPQ    60
80     KAVIFRTKLG KEICADPKEK WVQNYMKHLG RKAHTLKT                           98
```

       Seq ID NO: C274 Protein Sequence
       Protein Accession #: BAC05158.1

```
       1         11        21        31        41        51
```

```
        |         |         |         |         |         |
        MFLLTGGVSL KSAEKNPDPT WLQDKSWEEI CRASEFPAFR GLRQHFCEHI YEWREIYDSK    60
        EPHNAKFPAP MDKNLNELQK IIILRCLRPD KITPAITNYV TDKLGKKFVE PPPPDLTKSY   120
5       LDSNCTIPLI FVLSPGADPM ASLLKFANDK SMSGNKFQAI SLGQGQGPIA AKMIKAAIEE   180
        GTWVCLQNCH LAVSWMPMLE KICEDFTSET CNSSFRLWLT SYPSSKFPVT ILQNGVKMTN   240
        EPPTGLRLNL LQSYLTDPVS DPEFPKGCRG KELLFINEYD TIPFEAISYL TGECNYGGRV   300
        TDDWDRRLLL TMLADFYNLY IVENPHYKFS PSGNYFAPPK GTYEDYIEFI KKLPPTQHPE   360
        IFGLHENVDI SKDLQQTKTL FESLLLTQGG SKQTGASGST DQILLEITKD ILNKLPSDFD   420
        IEMALRKYPV RYEESMNTVL VQEMERFNNL IITIRNTLRD LEKAIKGVVV MDSALEALSS   480
10      SLLVGKVPEI WAKRSYPSLK PLGSYITDFL ARLNFLQDWY NSGKPCVFWL SGFFFPTQAFL  540
        TGAMQNYARK YTTPIDLLGY BFEVIPSDTS DTSPEDGVYI HGLYLDGARW DRESGLLAEQ   600
        YPKLLFDLMP IIWIKPTQKS RIIKSDAYVC PLYKTSERKG TLSTTGHSTN FVIAMLLKTD   660
        QPTRHWIKRG VALLCQLDD                                                 679
```

15   Seq ID NO: C275 Protein Sequence
        Protein Accession #: AAA60212.1

```
        1          11        21        31        41        51
        |          |         |         |         |         |
20      MAESHLLQWL LLLLPTLCGP GTAAWTTSSL ACAQGPEFWC QSLEQALQCR ALGHCLQEVW    60
        GHVGADDLCQ ECEDIVHILN KMAKEAIFQD TMRKFLEQEC NVLPLKLLMP QCNQVLDDYF   120
        PLVIDYFQNQ TDSNGICMHL GLCKSRQPEP EQEPGMSDPL PKPLRDPLPD PLLDKLVLPV   180
        LPGALQARPG PHTQDLSEQQ FPIPLPYCWL CRALIKRIQA MIPKGALAVA VAQVCRVVPL   240
25      VAGGICQCLA ERYSVILLDT LLGRMLPQLV CRLVLRCSMD DSAGPRSPTG EWLPRDSECH   300
        LCMSVTTQAG NSSEQAIPQA MLQACVGSWL DREKCKQFVE QHTPQLLTLV PRGWDAHTTC   360
        QALGVCGTMS SPLQCIHSPD L                                             381
```

        Seq ID NO: C276 Protein Sequence
        Protein Accession #: NP_631911.1
30

```
        1          11        21        31        41        51
        |          |         |         |         |         |
        MLGCGIPALG LLLLLQGSAD GNGIQGFFYP WSCEGDIWDR ESCGGQAAID SPNLCLRLRC    60
35      CYRNGVCYHQ RPDENVRRKH MWALVWTCSG LLLLSCSICL FWWAKRRDVL HMPGFLAGPC   120
        DMSKSVSLLS KHRGTKKTPS TGSVPVALSK ESRDVEGGTE GEGTEEGEET EGEEEED      177
```

        Seq ID NO: C277 Protein Sequence
        Protein Accession #: NP_473364.1

```
40      1          11        21        31        41        51
        |          |         |         |         |         |
        MKLVTIFLLV TISLCSYSAT AFLINKVPLP VDKLAPLPLD NILPFMDPLK LLLKTLGISV    60
        EHLVEGLRKC VNELGPEASE AVKKLLEALS HLV                                 93
```

45   Seq ID NO: C278 Protein Sequence
        Protein Accession #: FGENESH predicted

```
        1          11        21        31        41        51
        |          |         |         |         |         |
50      MPLSYAYKNA BTLAGRHTSS WMSRGAYQRR NTRAAGRPEE CTDRNWHAGR TRGIWLGQLE    60
        ERCSDVFGVS FFWWVRGLAG SGAKLQTFTP AQEGAPTVQR QAEALLKCRQ SGRPGRGGAE   120
        SERARDASML SPLSAAMRNY PTSSTIPPRR SYSPTEIAHK SYSCSLPDMK ISMAESGPSL   180
        DSLDILEDGE SGSPFLVTHL YFLGVVTTGM EQLDFETGPN IPDLQIYVKD EVGVTDLQVL   240
        TVQVTDVNEP PQFQGNLAED HLRADQPHFN AHSHTYVRVV ATALARHRLR SSIGSPFLGT   300
55      FCVVVGMQYF LISPPKSFRM SANGTLFSTT ELDFPEAGHRS FHLIVEVRDS GGLKASTELQ   360
        VNIVNLNDEV PRFTSPTRVY TVLEELSPGT IVANITAEDP DDEGFPSHLL YSITTVSKYF   420
        MINQLTGTIQ VAQRIDRDAG ELRQNPTISL EVLVKDRPYG GQENRIQITF IVEDVNDNPA   480
        TCQKFTFRSS LHPALCSKTL TWMDTVLDCF HAADKDIPVT GRPTKERGLI GLTVPHGWGS   540
        LTIMAEGKEE QVTSYMDGSR QRDRACVGKL LLIKPSDLMR LSHYHENNSG KTCPHDSISS   600
60      YQVPPTTCRN SRIQATNNED TSSVTVTVNI LEENDEKPIC TPNSYFLALP VDLKVGTNIQ   660
        NFKLTCTDLD SSPRSFRYSI GPGNVNNHPT FSPNAGSNVT RLLLTSRFDY AGGFDKIWDY   720
        KLLVYVTDDN LMSDRKKAEA LVETGTVTLS IKVIPHPTTI ITTTPRPRVT YQVLRKNVYS   780
        PSAWYVPFVI TLGSILLLGL LVYLVVLLAK AIHRHCPCKT GKNKEPLTKK GETKTAERDV   840
        VVETIQMNTI FDGEAIDPEP EQASLBLYAL LPSCCDPSPV TLRKVQVCGE SBETGQCSGH   900
65      ITLPGKIPVD DPRKQETGLQ GDFEVWTLCP AVKVVVGSPQ AERCIRLALS LKKYSSD      957
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        Seq ID NO: C279 Protein Sequence
        Protein Accession #: XP_168571.1

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70      1          11        21        31        41        51
        |          |         |         |         |         |
        MINQLTGTIQ VAQRIDRDAG ELRQNPTISL EVLVKDRPYG GQENRIQITF IVEDVNDNPA    60
        TCQKFTFPSIM VPERTAKGTL LLDLNKFCFD DDSEAPNNRF NPTMPSGVGS GSRFLQDPAG   120
        SGKIVLIGDL DYENPSNLAA GNKYTVIIQV QDVAPPYYKN NVYVYILTSP ENEPPLIFDR   180
75      PSYVFDVSER RPAQGHLSGP EEKRLLSICM VRAVCHHFGL HIASGSPRVP GRPIGQSHPQ   240
        TLPLQDWEEQ GTSDKERRNE DCRERRRGGN YPDEHYL                             277
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        Seq ID NO: C280 Protein Sequence
        Protein Accession #: NP_005257.2
80

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        1          11        21        31        41        51
        |          |         |         |         |         |
        MGDWSPLGNF LEEVHKHSTV VGKVWLTVLF IFRMLVLGTA ABSSWGDEQA DFRCDTIQPG    60
        CQNVCYDQAF PISHIRYWVL QIIFVSTPSL VYMGHAMHTV RMQEKRKLRE AERAKEVRGS   120
```

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          GSYEYPVAEK AELSCWEEGN GRIALQGTLL NTYVCSILIR TTMEVGFIVG QYPIYGIFLT    180
          TLHVCRRSPC PHPVNCYVSR PTEKNVFIVF MLAVAALSLL LSLAELYHLG WKKIRQRFVK    240
          PRQHMAKCQL SGPSVGIVQS CTPPPDFNQC LENGPGGKFF NPFSNNMASQ QNTDNLVTEQ    300
     5    VRGQEQTPGE GFIQVRYGQK PEVPNGVSPG HRLPHGYHSD KRRLSKASSK ARSDDLSV      358

          Seq ID NO: C281 Protein Sequence
          Protein Accession #: NP_055274.2

          1          11         21         31         41         51
     10   |          |          |          |          |          |
          MYLSICCCFL LWAPALTLKN LNYSVPEEQG AGTVIGNIGR DARLQPGLPP AERGGGGRSK    60
          SGSYRVLENS APHLLDVDAD SGLLYTKQRI DRESLCRHNA KCQLSLEVFA NDKEICMIKV    120
          EIQDINDNAP SFSSDQIEMD ISENAAPGTR FPLTSAHDPD AGENGLRTYL LTRDDHGLFG    180
          LDVKSRGDGT KFPELVIQKA LDREQQNHHT LVLTALDGGE PPRSATVQIN VKVIDSNDNS    240
     15   PVFEAPSYLV ELPENAPLGT VVIDLNATDA DEGPNGEVLY SFSSYVPDRV RELFSIDPKT    300
          GLIRVKGNLD YEENGMLEID VQARDLGPNP IPAHCKVTVK LIDRNDNAPS IGFVSVRQGA    360
          LSEAAPPGTV IALVRVTDRD SGKNGQLQCR VLGGGGTGGG GGLGGPGGSV PFKLEENYDN    420
          FYTVVTDRPL DRETQDEYNV TIVARDGGSP PLNSTKSFAI KILDENDNPP RFTKGLYVLQ    480
          VHENNIPGEY LGSVLAQDPD LGQNGTVSYS ILPSHIGDVS IYTYVSVNPT NGAIYALRSF    540
     20   NFEQTKAFEF KVLAKDSGAP AHLESNATVR VTVLDVNDNA PVIVLPTLQN DTAELQVPRN    600
          AGLGYLVSTV RALDSDFGES GRLTYEIVDG NDDHLFEIDP SSGEIRTLHP FWEDVTPVVE    660
          LVVKVTDHGK PTLSAVAKLI IRSVSGSLPE GVPRVNGEQH HWDMSLPLIV TLSTISIILL    720
          AAMITIAVKC KRENKEIRTY NCRIAEYSHP QLGGGKGKKK KINKNDIMLV QSEVEERNAM    780
     25   NVMNVVSSPS LATSPMYFDY QTRLPLSSPR SEVMYLKPAS NNLTVPQGHA GCHTSFTGQG    840
          TNASETPATR MSIIQTDNFP AEPNYMGSRQ QFVQSISVAP RLRTQKEPA             889

          Seq ID NO: C282 Protein Sequence
          Protein Accession #: NP_005592.1

     30   1          11         21         31         41         51
          |          |          |          |          |          |
          MELCRSLALL GGSLGLMFCL IALSTDFWFE AVGPTHSAHS GLWPTGHGDI ISGYIHVTQT    60
          FSIMAVLWAL VSVSFLVLSC FPSLFPPGHG PLVSTTAAFA AAISMVVAMA VYTSERWDQP    120
     35   PHPQIQTFFS WSFYLGWVSA ILLLCTGALS LGAHCGGPRP GYETL                  165

          Seq ID NO: C283 Protein Sequence
          Protein Accession #: NP_006424.2

     40   1          11         21         31         41         51
          |          |          |          |          |          |
          MATWALLLLA AMLLGNPGLV FSRLSPEYYD LARAHLRDEE KSCPCLAQEG PQGDLLTKTQ    60
          ELGRDYRTCL TIVQKLKKMV DKPTQRSVSN AATRVCRTGR SRWRDVCRNF MRRYQSRVTQ    120
          GLVAGETAQQ ICEDLRLCIP STGPL                                          145

     45   Seq ID NO: C284 Protein Sequence
          Protein Accession #: NP_005594.1

     50   1          11         21         31         41         51
          |          |          |          |          |          |
          MKVSAAALAV ILIATALCAP ASASPYSSDT TPCCFAYIAR PLPRAHIKEY FYTSGKCSNP    60
          AVVFVTRKNR QVCANPEKKW VREYINSLEM S                                   91

     55   Seq ID NO: C285 Protein Sequence
          Protein Accession #: NP_071437.1

          1          11         21         31         41         51
          |          |          |          |          |          |
     60   MAPGRAVAGL LLLAAAGLGG VAEGPGLAFS EDVLSVPGAN LSLSAAQLQH LLEQMGAASR    60
          VGVPBPGQLH FNQCLTAEEI FSLHGFSNAT QITSSKFSVI CPAVLQQLNF HPCEDRPKHK    120
          TRPSHSEVWG YGFLSVTIIN LASLLGLILT PLIKKSYFPK ILTPFVGLAI GTLFSNAIFQ    180
          LIPEAFGFDP KVDSYVEKAV AVFGGFYLLF FFERMLKMLL KTYGQNGHTH FGNDNFGPQE    240
          KTHQPKALPA INGVTCYANP AVTEANGHIH FDNVSVVSLQ DGKKEPSSCT CLKGPKLSEI    300
     65   GTIAWMITLC DALHNFIDGL AIGASCTLSL LQGLSTSIAI LCEEFPHELG DFVILLNAGM    360
          STRQALLFNF LSACSCYVGL AFGILVGNNF APNIIFALAG GMFLYISLAD MFPEMNDMLR    420
          EKVTGRKTDF TFFMIQNAGM LTGFTAILLI TLYAGEIELE                          460

     70   Seq ID NO: C286 Protein Sequence
          Protein Accession #: NP_004175.1

          1          11         21         31         41         51
          |          |          |          |          |          |
     75   MPNSEPASLL ELFNSIATQG ELVRSLKAGN ASKDEIDSAV KMLVSLKMSY KAAAGEDYKA    60
          DCPPGNPAPT SNHGPDATEA EEDFVDPWTV QTSSAKGIDY DKLIVRFGSS KIDKELINRI    120
          ERATGQRPHH FLRRGIFFSH RDMNQVLDAY ENKKPFYLYT GRGPSSEAMH VGHLIPFIFT    180
          KWLQDVFNVP LVIQMTDDEK YLWKDLTLDQ AYGDAVENAK DIIACGFDIN KTPIFSDLDY    240
          MGMSSGFYKN VVKIQKHVTF NQVKGIFGFT DSDCIGKISP PAIQAAPSFS NSFPQIFRDR    300
          TDIQCLIPCA IDQDPYFRMT RDVAPRIGYP KPALLHSTPF PALQGAQTKM SASDPNSSIF    360
     80   LTDTAKQIKT KVNKHAFSGG RDTIEEHRQF GGNCDVDVSP MYLTFFLEDD DKLEQIRKDY    420
          TSGAMLTGEL KKALIEVLQP LIAEHQARRK EVTDEIVKEF MTPRKLSFDF Q              471

          Seq ID NO: C287 Protein Sequence
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Protein Accession #: NP_004929.1

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      1          11         21         31         41         51
      |          |          |          |          |          |
MTVFRQENVD DYYDTGEELG SGQFAVVKKC REKSTGLQYA AKFIKKRRTK SSRRGVSRED    60
IEREVSILKE IQHPNVITLH EVYENKTDVI LILELVAGGE LFDFLAEKES LTEEEATEFL   120
KQILNGVYYL HSLQIAHFDL KPENIMLLDR NVPKPRIKII DFGLAHKIDF GNEFKNIFGT   180
PEFVAPEIVN YEPLGLEADM WSIGVITYIL LSGASPPFLGD TKQETLANVS AVNYEFEDEY   240
PSNTSALAKD FIRRLLVKDP KKRMTIQDSL QHPWIKPKDT QQALSRKASA VNMEKPKKFA   300
ARKKWKQSVR LISLCQRLSR SFLSRSNMSV ARSDDTLDEE DSFVMKAIIH AINDDNVPGL   360
QHLLGSLSNY DVNQPNKHGT PPLLIAAGCG NIQILQLLIK RGSRIDVQDK GGSNAVYWAA   420
RHGHVDTLKF LSENKCPLDV KDKSGEMALH VAARYGHADV AQVTCAASAQ IPISRTKEEE   480
TPLHCAAWHG YYSVAKALCE AGCNVNIKNR EGETPLLTAS ARGYHDIVEC LAEHGADLNA   540
CDKDGHIALH LAVRRCQMEV IKTLLSQGCF VDYQDRHGNT PLHVACKDGN MPIVVALCEA   600
NCNLDISNKY GRTPLHLAAN NGILDVVRYL CLMGASVEAL TTDGKTAEDL ARSEQHEHVA   660
GLLARLRKDT HRGLFIQQLR PTQNLQPRIK LKLFGHSGSG KTTLVESLKC GLLRSFFRRR   720
RPRLSSTNSS RFPPSPLASK PTVSVSINNL YPGCENVSVR SRSMMFEPGL TKGMLEVFVA   780
PTHHPHCSAD DQSTKAIDIQ NAYLNGVGDF SVWRFSGNPV YFCCYDYFAA NDPTSIHVVV   840
FSLEEPYEIQ LNPVIFWLSF LKSLVPVEEP IAFGGKLKNP LQVVLVATHA DIMNVPRPAG   900
GEFGYDKDTS LLKEIRNRFG NDLHISNKLF VLDAGASGSK DMKVLRNHLQ EIRSQIVSVC   960
PPMTHLCEKI ISTLPSWRKL NGPNQLMSLQ QFVYDVQDQL NPLASEEDLR RIAQQLHSTG  1020
EINIMQSETV QDVLLLDPRW LCTNVLGKLL SVETPRALHH YRGRYTVEDI QRLVPDSDVE  1080
ELLQILDAMD ICARDLSSGT MVDVPALIKT DNLHRSWADE EDEVMVYGGV RIVPVEHLTP  1140
PPCGIFHKVQ VNLCRWIHQQ STEGDADIRL WVNGCKLANR GAELLVLLVN HGQGIEVQVR  1200
GLETEKIKCC LLLDSVCSTI ENVMATTLPG LLTVKHYLSP QQLREHHEPV MIYQPRDFFR  1260
AQTLKETSLT NTMGGYKESF SSIMCFGCHD VYSQASLGMD IHASDLNLLT RRKLSRLLDP  1320
PDPLGKDWCL LAMNLGLPDL VAKYNTNNGA PKDFLPSPLH ALLREWTTYP ESTVGTLMSK  1380
LRELGRRDAA DLLLKASSVF KINLDGNGQE AYASSCNSGT SYNSISSVVS R           1431
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Seq ID NO: C288 Protein Sequence
Protein Accession #: NP_002072.1

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      1          11         21         31         41         51
      |          |          |          |          |          |
MELRARGWWL LCAAAALVAC ARGDPASKSR SCGEVRQIYG AKGFSLSDVP QAEISGEHLR    60
ICPQGYTCCT SEMEENLANR SHAELETALR DSSRVLQAML ATQLRSFDDH FQHLLNDSER   120
TLQATFPGAF GELYTQNARA FRDLYSELRL YYRGANLHLE ETLAEFWARL LERLFKQLHP   180
QLLLPDDYLD CLGKQAEALR PFGEAPRELR LRATRAFVAA RSFVQGLGVA SDVVRKVAQV   240
PLGPECSRAV MKLVYCAHCL GVPGARPCPD YCRNVLKGCL ANQADLDAEW RNLLDSMVLI   300
TDKFWGTSGV ESVIGSVHTW LAEAINALQD NRDTLTAKVI QGCGNPKVNP QGPGPEEKRR   360
RGKLAPRERP PSGTLEKLVS EAKAQLRDVQ DFWISLPGTL CSEKMALSTA SDDRCWNGMA   420
RGRYLPEVMG DGLANQINNP EVEVDITKPD MTIRQQIMQL KIMTNRLRSA YNGNDVDFQD   480
ASDDGSGSGS                                                         490
```

Seq ID NO: C289 Protein Sequence
Protein Accession #: AAH30205.1

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      1          11         21         31         41         51
      |          |          |          |          |          |
MIILIYLFLL LWEDTQGWGP KDGIFHNSIW LERAAGVYHR EARSGKYKLT YAEAKAVCEF    60
EGGHLATYKQ LEAARKIGFH VCAAGWMAKG RVGYPIVKPG PNCGFGKTGI IDYGIRLNRS   120
ERWDAYCYNP HAKECGGVFT DPKQIFKSPG PPNEYEDNQI CYWHIRLKYG QRIHLSFLDF   180
DLEDDPGCLA DYVBIYDSYD DVHGFVGRYC GDELPDDIIS TGNVMTLKFL SDASVTAGGF   240
QIKYVAMDPV SKSSQGKNTS TTSTGNKNFL AGRFSHL                           277
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Seq ID NO: C290 Protein Sequence
Protein Accession #: NP_001973.1

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      1          11         21         31         41         51
      |          |          |          |          |          |
MRANDALQVL GLLFSLARGS EVGNSQAVCP GTLNGLSVTG DAENQYQTLY KLYERCEVVM    60
GNLEIVLTGH NADLSPLQWI REVTGYVLVA MNEPSTLPLP NLRVVRGTQV YDGKFAIFVM   120
LNYNTNSSHA LRQLRLTQLT EILSGGVYIE KNDKLCHMDT IDWRDIVRDR DAEIVVKDNG   180
RSCPPCHEVC KGRCWGPGSE DCQTLTKTIC APQCNGHCFG PNPNQCCHDE CAGGCSGPQD   240
TDCFACRHFN DSGACVPRCP QPLVYNKLTP QLEPNPHTKY QYGGVCVASC PHNFVVDQTS   300
CVRACPPDKM EVDKNGLKMC EPCGGLCPKA CEGTGSGSRF QTVDSSNIDG FVNCTKILGN   360
LDFLITGLNG DPWHKIPALD PEKLNVFRTV REITGYLNIQ SWPPHMHNFS VFSNLTTIGG   420
RSLYNRGFSL LIMKNLNVTS LGFRSLKEIS AGRIYISANR QLCYHHSLNW TKVLRGPTEE   480
RLDIKHNRPR RDCVAEGKVC DPLCSSGGCW GPGPGQCLSC RNYSRGGVCV THCNFLNGEP   540
REPAHEAECF SCHPECQPMG GTATCNGSGS DTCAQCAHFR DGPHCVSSCP HGVLGAKGPI   600
YKYPDVQNEC RPCHENCTQG CKGPELQDCL GQTLVLIGKT HLTMALTVIA GLVVIFMMLG   660
GTFLYWRGRR IQNKRAMRRY LERGESIEPL DPSEKANKVL ARIFKETELR KLKVLGSGVF   720
GTVHKGVWIP EGESIKIPVC IKVIEDKSGR QSFQAVTDHM LAIGSLDHAH IVRLLGLCPG   780
SSLQLVTQYL PLGSLLDHVR QHRGALGPQL LLNWGVQIAK GMYYLEEHGM VHRNLAARNV   840
LLKSPSQVQV ADFGVADLLP PDDKQLLYSE AKTPIKWMAL ESIHFGKYTH QSDVWSYGVT   900
VWELMTFGAE PYAGLRLAEV PDLLEKGERL AQPQICTIDV YMVMVKCWMI DENIRPTFKE   960
LANEFTRMAR DPPRYLVIKR ESGPGIAPGP EPHGLTNKKL EEVLEPELD LDLDLEAEED  1020
NLATTTLGSA LSLPVGTLNR PRGSQSLLSP SSGYMPMNQG NLGGSCQESA VSGSSERCPR  1080
PVSLHPMPRG CLASESSEGH VTGSEAELQE KVSMCRSRSR SRSPRPRGDS AYHSQRHSLL  1140
TPVTPLSPPG LEEEDVNGYV MPDTHLKGTP SSREGTLSSV GLSSVLGTEE EDEDEEYEYM  1200
NRRRRHSPPH PPRPSSLEEL GYEYMDVGSD LSASLGSTQS CPLHPVPIMP TAGTTPDEDY  1260
EYMNRQRDGG GPGGDYAAMG ACPASEQGYE EMRAFQGPGH QAPHVHYARL KTLRSLEATD  1320
SAFDNPDYWH SRLFPKANAQ RT                                          1342
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1350

Seq ID NO: C291 Protein Sequence
Protein Accession #: NP_001207.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MAPLCPSPWL PLLIPAPAPG LTVQLLLSLL LLMPVHPQRL PRMQEDSPLG GGSSGEDDPL   60
GEEDLPSEED SPREEDPPGE EDLPGEEDLP GEEDLPEVKP KSEEEGSLKL EDLPTVEAPG  120
DPQEPQNNAH RDKEGDDQSH WRYGGDPPWP RVSPACAGRF QSPVDIRPQL AAFCPALRPL  180
ELLGFQLPPL PELRLRNNGH SVQLTLPPGL EMALGPGREY RALQLHLHWG AAGRPGSEHT  240
VEGHRFPAEI HVVHLSTAFA RVDEALGRPG GLAVLAAFLE EGPEENSAYE QLLSRLEEIA  300
EEGSETQVPG LDISALLPSD FSRYFQYEGS LTTPPCAQGV IWTVFNQTVM LSAKQLHTLS  360
DTLWGPGDSR LQLNFRATQP LNGRVIEASP PAGVDSSPRA AEPVQLNSCL AAGDILALVF  420
GLLPAVTSVA FLVQMRRQHR RGTKGGVSYR PAEVAETGA                        459
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Seq ID NO: C292 Protein Sequence
Protein Accession #: NP_004198.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MGGAVVDEGP TGVKAPDGGW GWAVLFGCFV ITGFSYAFPK AVSVFFKELI QEFGIGYSDT   60
AWISSILLAM LYGTGPLCSV CVNRFGCRPV MLVGGLPASL GMVAASFCRS IIQVYLTTGV  120
ITGLGLALNF QPSLIMLNRY FSKRRPMANG LAAAGSPVFL CALSPLGQLL QDRYGWRGGF  180
LILGGLLLNC CVCAALMRPL VVTAQPGSGP PRPSRRLLDL SVFRDRGFVL YAVAASVMVL  240
GLFVPPVFVV SYAKDLGVPD TKAAPLLTIL GFIDIFARPA AGFVAGLGKV RPYSVYLFSF  300
SMFFNGLADL AGSTAGDYGG LVVFCIFFGI SYGMVGALQF TNEAFEKIPS ETLNRILGDP  360
LMEAVAVLVG PPSGGKLLDA THVYMYVPIL AGAEVLTSSL ILLLGNFFCI RKKPKEPQPE  420
VAAAEEEKLH KPPADSGVDL REVEHFLKAE PEKNGEVVHT PETSV                 465
```

Seq ID NO: C293 Protein Sequence
Protein Accession #: NP_000349.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MALFVRLLAL ALALALGPAA TLAGPAKSPY QLVLQHSRLR GRQHGPNVCA VQKVIGTNRK   60
YFTNCKQWYQ RKICGKSTVI SYECCPGYEK VPGEKGCPAA LPLSNLYETL GVVGSTTTQL  120
YTDRTEKLRP EMEGPGSPTI FAPSNEAWAS LPAEVLDSLV SNVNIELLNA LRYHMVGRRV  180
LTDELKHGMT LTSMYQNSNI QIHHYPNGIV TVNCARLLKA DHHATNGVVH LIDKVISTIT  240
NNIQQIIEIE DTPETLRAAV AASGLNTMLE GNGQYTLLAP TNEAFEKIPS ETLNRILGDP  300
EALRDLLNNH ILKSAMCAEA IVAGLSVETL EGTTLEVGCS GDMLTINGKA IISNKDILAT  360
NGVIHYIDEL LIPDSAKTLF ELAAESDVST AIDLFRQAGL GNHLSGSERL TLLAPLNSVF  420
KDGTPPIDAH TRNLLRNHII KDQLASKYLY HGQTLETLGG KKLRVFVYRN SLCIENSCIA  480
AHDKRGRYGT LFTMDRVLTP PMGTVMDVLK GDNRFSMLVA AIQSAGLTET LNREGVYTVF  540
APTNEAFRAL PPRERSRLLG DAKELANILK YHIGDEILVS GGIGALVRLK SLQGDKLEVS  600
LKNNVVSVNK EPVAEPDIMA TNGVVHVITN VLQPPANRPQ ERGDELADSA LEIFKQASAF  660
SRASQRSVRL APVYQKLLER MKH                                          683
```

Seq ID NO: C294 Protein Sequence
Protein Accession #: NP_006527.1

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1          11         21         31         41         51
|          |          |          |          |          |
MTQRSIAGPI CNLKFVTLLV ALSSELPFLG AGVQLQDNGY NGLLIAINPQ VPENQNLISN   60
IKEMITEASF YLFNATKRRV FFRNIKILIP ATWKANNNSK IKQESYEKAN VIVTDWYGAH  120
GDDPYTLQYR GCGKEGKYIH FTPNFLLNDN LTAGYGSRGR VFVHEWAHLR WGVFDEYNND  180
KPFYINGQNQ IKVTRCSSDI TGIFVCEKGP CPQENCIISK LFKEGCTFIY NSTQNATASI  240
MFMQSLSSVV EFCNASTHNQ EAPNLQNQMC SLRSAWDVIT DSADFHHSFP MNGTELPPPP  300
TFSLVQAGDK VVCLVLDVSS KMAEADRLLQ LQQAAEFYLM QIVEIHTFVG IASFDSKGEI  360
RAQLHQINSN DDRKLLVSYL PTTVSAKTDI SICSGLKKGF BVVEKLNGKA YGSVMILVTS  420
GDDKLLGNCL PTVLSSGSTI HSIALGSSAA PNLEELSRLT GGLKPFVPDI SNSNSMIDAF  480
SRISSGTGDI FQQHIQLEST GENVKPHHQL KNTVTVDNTV GNDTMFLVTW QASGPPEIIL  540
PDPDGRKYYT NNFITNLTFR TASLWIPGTA KPGHWTYTLN NTHHSLQALK VTVTSRASNS  600
AVPPATVEAF VERDSLHFPH PVMIYANVKQ GFYPILNATV TATVEPETGD FVTLRLLDDG  660
AGADVIKNDG IYSRYFFSFA ANGRYSLKVH VNHSPSISTP AHSIPGSHAM YVPGYTANGN  720
IQMNAPRKSV GRNEEERKWG FSRVSSGGSF SVLGVPAGPH PDVFPPCKII DLEAVKVEEE  780
LTLSWTAPGE DFDQGQATSY EIRMSKSLQN IQDDFNNAIL VNTSKRNPQQ AGIREIFTFS  840
PQISTNGPEH QPNGETHESH RIYVAIRAMD RNSLQSAVSN IAQAPLFIPP NSDPVPARDY  900
LILKGVLTAM GLIGIICLII VVTHHTLSRK KRADKKENGT KLL                  943
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Seq ID NO: C295 Protein Sequence
Protein Accession #: Eos sequence

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1          11         21         31         41         51
|          |          |          |          |          |
MKFLLILLLQ ATASGALPLN SSTSLEKNNV LFGERYLEKF YGLEINKLPV TKMKYSGNLM   60
KEKIQEMQHF LGLKVTGQLD TSTLEMMHAP RCGVPDVHHF REMPGGPVWR KHYITYRINN  120
YTPDMNREDV DYAIRKAFQV WSNVTPLKFS KINTGMADIL VVFARGAHGD FHAFDGKGGI  180
LAHAFGPGSG IGGDAHFDED EFWTTHSGGT NLFLTAVHEI GHSLGLGHSS DPKAVMFPTY  240
KYVDINTFRL SADDIRGIQS LYGDPKENQR LPNPDNSEPA LCDPNLSFDA VTTVGNKIFF  300
FKDRFFWLKV SERPKTSVNL ISSLWPTLPS GIEAAYEIEA RNQVFLFKDD KYWLISNLRP  360
EFNYPKSIHS FGFPNFVKKI DAAVFNPRFY RTYFFVDNQY WRYDERRQMM DPGYPKLITK  420
NFQGIGPKID AVFYSKNKYY YFFQGSNQFE YDFLLQRITK TLKSNSWFGC .          470
```

Seq ID NO: C296 Protein Sequence
Protein Accession #: Eos sequence

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        1          11         21         31         41         51
        |          |          |          |          |          |
 5      MKFLLILLLQ ATASGALPLN SSTSLEKNNV LFGERYLEKF YGLEINKLPV TKMKYSGNLM   60
        REKIQEMQHP LGLKVTGQLD TSTLEMMHAP RCGVPDVHHF REMPGGPVWR KHYITYRINN   120
        YTPDMNREDV DYAIRKAFQV WSNVTPLKFS KINTGMADIL VVFARGAHGD FHAPDGKGGI   180
        LAHAFGPGSG IGGDAHFDED EFWTTHSGGT NLFLTAVHAI GHSLGLGHSS DPKAVMFPTY   240
        KYVDINTFRL SADDIRGIQS LYGDPKENQR LPNPDNSEPA LCDPNLSFDA VTTVGNKIFF   300
 10     FKDRFFWLKV SERPKTSVNL ISSLWPTLPS GIEAAYEIEA RNQVFLFKDD KYWLISNLRP   360
        EPNYPKSIHS FGFPNFVKKI DAAVFNPRPY RTYFFVDNQY WRYDERRQMM DPGYPKLITK   420
        NFQGIGPKID AVFYSKNKYY YFFQGSNQFE YDFLLQRITK TLKSNSWFGC             470


Seq ID NO: C297 Protein Sequence
Protein Accession #: NP_008883.1


        1          11         21         31         41         51
        |          |          |          |          |          |
        MAKDNSTVRC FQGLLIFGNV IIGCCGIALT AECIPFVSDQ HSLYPLLEAT DNDDIYGAAW   60
        IGIFVGICLF CLSVLGIVGI MKSSRKILLA YFILMPIVYA FEVASCITAA TQRDFFTPNL   120
        FLKQMLERYQ NNSPPNNDDQ WKNNGVTKTW DRLMLQDNCC GVNGPSDWQK YTSAFRTENN   180
        DADYPWPRQC CVMNNLKEPL NLEACKLGVP GFYHNQGCYE LISGPMNRHA WGVAWFGPAI   240
        LCWTFWVLLG TMFYWSRIEY                                             260


Seq ID NO: C298 Protein Sequence
Protein Accession #: NP_001784.2


        1          11         21         31         41         51
        |          |          |          |          |          |
        MGLPRGPLAS LLLLQVCWLQ CAASEPCRAV FREAEVTLEA GGAEQEPGQA LGKVFMGCPG   60
        QEPALFSTDN DDFTVRNGET VQERRSLKER NPLKIFPSKR ILRRHKRDWV VAPISVPENG   120
        KGPPPQRLNQ LKSNKDRDTK IFYSITGPGA DSPPEGVFAV EKETGWLLLN KPLDREEIAK   180
        YELFGHAVSE NGASVEDPMN ISIIVTDQND HKPKFTQDTF RGSVLEGVLP GTSVMQVTAT   240
        DEDDAIYTYN GVVAYSIHSQ EPKDPHDLMF TIHRSTGTIS VISSGLDREK VPEYTLTIQA   300
        TDMDGDGSTT TAVAVVEILD ANDNAPMFDP QKYEAHVPEN AVGHEVQRLT VTDLDAPNSP   360
        AWRATYLIMG GDDGDHFTIT THPESNQGIL TTRKGLDFEA KNQHTLYVEV TNEAPFVLKL   420
        PTSTATIVVH VEDVNEAPVP VPPSKVVEVQ EGIPTGEPVC VYTAEDPDKE NQKISYRILR   480
        DPAGWLAMDP DSGQVTAVGT LDREDEQFVR NNIYEVMVLA MDNGSPPTTG TGTLLLTLID   540
        VNDHGPVPEP RQITICNQSP VRQVLNITDK DLSPHTSPFQ AQLTDDSDIY WTAEVNEEGD   600
        TVVLSLKKPL KQDTYDVHLS LSDHGNKEQL TVIRATVCDC HGHVETCPGP WKGGFILPVL   660
        GAVLALLFLL LVLLLLVRKK RKIKEPLLLP EDDTRDNVFY YGEEGGGEED QDYDITQLHR   720
        GLEARPEVVL RNDVAPTIIP TPMYRPRPAN PDEIGNPIIE NLKAANTDPT APPYDTLLVF   780
        DYEGSGSDAA SLSSLTSSAS DQDQDYDYLN EWGSRFKKLA DMYGGGEDD              829


Seq ID NO: C299 Protein Sequence
Protein Accession #: NP_005620.1


        1          11         21         31         41         51
        |          |          |          |          |          |
        MAKKSAENGI YSVSGDEKKG PLIAPGPDGA PAKGDGPVGL GTPGGRLAVP PRETWTRQMD   60
        FIMSCVGFAV GLGNVWRFPY LCYKNGGGVP LIPYVLIALV GGIPIFFLEI SLGQFMKAGS   120
        INVWNICPLF KGLGYASMVI VPYCNTYYIM VLAWGFYYLV KSFTTTLPWA TCGHTWNTPD   180
        CVEIFRHEDC ANASLANLTC DQLADRRSPV IEFWENKVLR LSGGLEVPGA LNWEVTLCLL   240
        ACWVLVYFCV WKGVKSTGKI VYFTATFPYV VLVVLLVRGV LLPGALDGII YYLKPDWSKL   300
        GSPQVWIDAG TQIFFSYAIG LGALTALGSY NRFNNNCYKD AIILALINSG TSFFAGFVVF   360
        SILGFMAAEQ GVHISKVAES GPGLAFIAYP RAVTLMPVAP LWAALPFFML LLLGLDSQFV   420
        GVEGFITGLL DLLPASYYFR FQRBISVALC CALCFVIDLS MVTDGGMYVF QLFDYYSASG   480
        TTLLWQAFWE CVVVAWVYGA DRFMDDIACM IGYRPCPWMK WCWSFFTPLV CMGIFIFNVV   540
        YYEPLVYNNT YVYPWWGEAM GWAFALSSML CVPLHLLGCL LRAKGTMAER WQHLTQPIWG   600
        LHHLEYRAQD ADVRGLTTLT PVSESSKVVV VESVM                            635


Seq ID NO: C300 Protein Sequence
Protein Accession #: NP_006507.1


        1          11         21         31         41         51
        |          |          |          |          |          |
        MEPSSKKLTG RLMLAVGGAV LGSLQFGYNT GVINAPQKVI EEFYNQTWVH RYGESILPTT   60
        LTTLWSLSVA IFSVGGMIGS FSVGLFVNRF GRRNSMLMMN LLAFVSAVLM GFSKLGKSPE   120
        MLILGRFIIG VYCGLTTGFV PMYVGEVSPT AFRGALGTLH QLGIVVGILI AQVFGLDSIM   180
        GNKDLWPLLL SIIFIPALLQ CIVLPFCPES PRFLLINRNE ENRAKSVLKK LRGTADVTHD   240
        LQEMKEESRQ MMREKKVTIL ELFRSPAYRQ PILIAVVLQL SQQLSGINAV FYYSTSIFEK   300
        AGVQQPVYAT IGSGIVNTAF TVVSLFVVER AGRRTLHLIG LAGMAGCAIL MTIALALLEQ   360
        LPWMSYLSIV AIFGFVAFFE VGPGPIPWFI VAELFSQGPR PAAIAVAGFS NWTSNFIVGM   420
        CFQYVEQLCG PYVFIIFTVL LVLFFIFTYF KVPETKGRTF DEIASGFRQG GASQSDKTPE   480
        ELFHPLGADS QV                                                     492


Seq ID NO: C301 Protein Sequence
Protein Accession #: XP_035292.2


        1          11         21         31         41         51
        |          |          |          |          |          |
        MAGAGPKRRA LAAPAAEEKE EAREKMLAAK SADGSAPAGE GEGVTLQRNI TLLNGVAIIV   60
        GTIIGSGIFV TPTGVLKEAG SPGLALVVWA ACGVFSIVGA LCYAELGTTI SKSGGDYAYM   120
        LEVYGSLPAF LKLWIELLII RPSSQYIVAL VPATYLLKPP PTCPVPEEA AKLVACLCVL   180
        LLTAVNCYSV KAATRVQDAF AAAKLLALAL IILLGFVQIG KGDVSNLDPN FSFEGTKLDV   240
```

1352

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GNIVLALYSG LPAYGGWNYL NFVTEEMINP YRNLPLAIII SLPIVTLVYV LTNLAYFTTL    300
STEQMLSSEA VAVDFGNYHL GVMSWIIPVF VGLSCFGSVN GSLFTSSRLF FVGSREGHLP    360
SILSMIHPQL LTPVPSLVFT CVMTLLYAFS KDIFSVINFF SFFNWLCVAL AIIGMIWLRH    420
RKPELERPIK VNLALPVFFI LACLFLIAVS FWKTPVECGI GFTIILSGLP VYFFGVWWKN    480
KPKWLLQGIF STTVLCQKLM QVVPQET                                       507
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5

Seq ID NO: C302 Protein Sequence
Protein Accession #: NP_005259.1

10

```
1         11        21        31        41        51
|         |         |         |         |         |
MNWSIFEGLL SGVNKYSTAF GRIWLSLVFI FRVLVYLVTA ERVWSDDHKD FDCNTRQPGC    60
SNVCFDEFFP VSHVRLWALQ LILVTCPSLL VVMHVAYREV QEKRHREAHG ENSGRLYLNP   120
GKKRGGLWWT YVCSLVFKAS VDIAPLYVFH SFYPKYILPP VVKCHADPCP NIVDCFISKP   180
SEKNIFTLFM VATAAICILL NLVELIYLVS KRCHECLAAR KAQAMCTGHH PHGTTSSCKQ   240
DDLLSGDLIP LGSDSHPPLL PDRPRDHVKK TIL                                273
```

15

Seq ID NO: C303 Protein Sequence
Protein Accession #: NP_005121.1

20

```
1         11        21        31        41        51
|         |         |         |         |         |
MKICSLTLLS FLLLAAQVLL VEGKKKVKNG LHSKVVSEQK DTLGNTQIKQ KSRPGNKGKF    60
VTKDQANCRW AATEQEEGIS LKVECTQLDH EFSCVFAGNP TSCLKLKDER VYWKQVARNL   120
RSQKDICRYS KTAVKTRVCR KDFPESSLKL VSSTLFGNTK PRKEKTEMSP REHIKGKETT   180
PSSLAVTQTM ATKAPECVED PDMANQRKTA LEFCGETWSS LCTFFLSIVQ DTSC          234
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25

Seq ID NO: C304 Protein Sequence
Protein Accession #: AAH22542

30

```
1         11        21        31        41        51
|         |         |         |         |         |
MCSEIILRQE VLKDGFHRDL LIKVKFGESI EDLHTCRLLI KQDIPAGLYV DPYELASLRE    60
RNITEAVMVS ENFDIEAPNY LSKESEVLIY ARRDSQCIDC FQAFLPVHCR YHRPHSEDGE   120
ASIVVNNPDL LMFCDQAGSR RMIRFRFDSF DKTIEFPILK CWAHSEVAAP CALENEDICQ   180
WNKMKYKSVY KNVILQVPVG LTVHTSLVCS VTLLITILCS KKKKK                    225
```

35

Seq ID NO: C305 Protein Sequence
Protein Accession #: NP_004985.1

40

```
1         11        21        31        41        51
|         |         |         |         |         |
MSLWQPLVLV LLVLGCCFAA PRQRQSTLVL FPGDLRTNLT DRQLAEEYLY RYGYTRVAEM    60
RGESKSLGPA LLLLQKQLSL PETGELDSAT LKAMRTPRCG VPDLGRFQTF EGDLKWHHHN   120
ITYWIQNYSE DLPRAVIDDA FARAPALWSA VTPLTPTRVY SRDADIVIQF GVAEHGDGYP   180
FDGKDGLLAH AFPPGPGIQG DAHFDDDELW SLGKGVVVPT RFGNADGAAC HPPFIFEGRS   240
YSACTTDGRS DGLPWCSTTA NYDTDDRFGF CPSERLYTRD GNADGKPCQF PPIFQGQSYS   300
ACTTDGRSDG YRNCATTANY DRDKLFGPCP TRADSTVMGG NSAGELCVFP FTFLGKEYST   360
CTSEGRGDGR LWCATTSNFD SDKKWGFCPD QGYSLFLVAA HEFGHALGLD HSSVPEALMY   420
PMYRFTEGPP LHKDDVNGIR HLYGPRPEPE PRPPTTTTPQ PTAPPTVCPT GPPTVHPSER   480
PTAGPTGPPS AGPTGPPTAG PSTATTVPLS PVDDACNVNI FDAIAEIGNQ LYLFKDGKYW   540
RFSEGRGSRP QGPFLIADKW PALPRKLDSV FEEPLSKKLF FPSGRQVWVY TGASVLGPRR   600
LDKLGLGADV AQVTGALRSG RGKMLLFSGR RLWRFDVKAQ MVDPRSASEV DRMFPGVPLD   660
THDVFQYREK AYFCQDRFYW RVSSRSELNQ VDQVGYVTYD ILQCPED                 707
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55

Seq ID NO: C306 Protein Sequence
Protein Accession #: NP_000204

60

```
1         11        21        31        41        51
|         |         |         |         |         |
MAGPRPSPWA RLLLAALISV SLSGTLANRC KKAPVKSCTE CVRVDKDCAY CTDEMFRDRR    60
CNTQAELLAA GCQRESIVVM ESSFQITEET QIDTTLRRSQ MSPQGLRVRL RPGEERHFEL   120
EVFEPLESPV DLYILMDFSN SMSDDLDNLK KMGQNLARVL SQLTSDYTIG PGKFVDKVSV   180
PQTDMRPEKL KEPWPNSDPP FSFKNVISLT EDVDEFRNKL QGERISGNLD APEGGFDAIL   240
QTAVCTRDIG WRPDSTHLLV FSTESAFHYE ADGANVLAGI MSRNDERCHL DTTGTYTQYR   300
TQDYPSVPTL VRLLAKHNII PIFAVTNYSY SYYEKLHTYF PVSSLGVLQE DSSNIVELLE   360
EAFNRIRSNL DIRALDSPRG LRTEVTSKMP QKTRTGSFHI RRGEVGIYQV QLRALEHVDG   420
THVCQLPEDQ KGNIHLKPSF SDGLKMDAGI ICDVCTCELQ KEVRSARCSF NGDFVCGQCV   480
CSEGWSGQTC NCSTGSLSDI QPCLREGEDK PCSGRGECQC GHCVCYGEGR YEGQFCEYDN   540
FQCPRTSGFL CNDRGRCSMG QCVCEPGWTG PSCDCPLSNA TCIDSNGGIC NGRGHCECGR   600
CHCHQQSLYT DTICEINYSA IHPGLCEDLR SCVQCQAWGT GEKKGRTCEE CNFKVKMVDE   660
LKRAEEVVVR CSFRDEDDDC TYSYTMEGDG APGPNSTVLV HKKKDCPPGS FWWLIPLLLL   720
LLPLLALLLL LCWKYCACCK ACLALLPCCN RGHMVGFKED HYMLRENLMA SDHLDTPMLR   780
SGNLKGRDVV RWKVTNNMQR PGFATHAASI NPTELVPYGL SLRLARLCTE NLLKPDTREC   840
AQLRQEVEEN LNEVYRQISG VHKLQQTKFR QQPNAGKKQD HTIVDTVLMA PRSAKPALLK   900
LTEKQVEQRA FHDLKVAPGY YTLTADQDAR GMVEFQEGVE LVDVRVPLFI RPEDDDEKQL   960
LVEAIDVPAG TATLGRRLVN ITIIKEQARD VVSPEQPEFS VSRGDQVARI PVIRRVLDGG  1020
KSQVSYRTQD GTAQGNRDYI PVEGELLPQP GEAWKELQVK LLELQEVDSL LRGRQVRRPH  1080
VQLSNPKFGA HLGQPHSTTI IIRDPPDELDR SPTSQMLSSQ PPPHGDLGAP QNPNAKAAGS  1140
RKIHFNWLPP SGKPMGYRVK YWIQGDSESE AHLLDSKVPS VELTNLYPYC DYEMKVCAYG  1200
AQGEGPYSSL VSCRTHQEVP SEPGRLAFNV VSSTVTQLSW AEPAETNGEI TAYEVCYGLV  1260
NDDNRPIGPM KKVLVDNPKN RMLLIENLRE SQPYRYTVKA RNGAGWGPER EAIINLATQP  1320
KRPMSIPIIP DIPIVDAQSG EDYDSFLMYS DDVLRSPSGS QRPSVSDDTG CGWKFEPLLG  1380
EELDLRRVTW RLPPELIPRL SASSGRSSDA EAPTAPRTTA ARAGRAAAVP RSATPGPPGE  1440
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.1353

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     HLVNGRMDFA  FPGSTNSLHR  MTTTSAAAYG  THLSPHVPHR  VLSTSSTLTR  DYNSLTRSEH  1500
     SHSTTLPRDY  STLTSVSSHD  SRLTAGVPDT  PTRLVFSALG  PTSLRVSWQE  PRCERPLQGY  1560
     SVEYQLLNGG  ELHRLNIPNP  AQTSVVVEDL  LPNHSYVFRV  RAQSQEGWGR  EREGVITIES  1620
  5  QVHPQSPLCP  LPGSAFTLST  PSAPGPLVFT  ALSPDSLQLS  WERPRRPNGD  IVGYLVTCEM  1680
     AQGGGPATAF  RVDGDSPESR  LTVPGLSENV  PYKFKVQART  TEGFGPEREG  IITIESQDGG  1740
     PFPQLGSRAG  LFQHPLQSEY  SSITTTHTSA  TEPPLVDGLT  LGAQHLEAGG  SLTRHVTQEP  1800
     VSRTLTTSGT  LSTHMDQQFF  QT                                            1822
```

Seq ID NO: C307 Protein Sequence
Protein Accession #: NP_076404.1

```
     1          11          21          31          41          51
     |          |           |           |           |           |
     MGFNLTLAKL  PNNELHGQES  HNSGNRSDGP  GKNTTLHNEF  DTIVLPVLYL  IIFVASILLN  60
     GLAVWIFFHI  RNKTSFIFYL  KNIVVADLIM  TLTPPFRIVH  DAGFGPWYFK  PILCRYTSVL  120
     FYANMYTSIV  FLGLISIDRY  LKVVKPFGDS  RMYSITFTKV  LSVCVWVIMA  VLSLPNIILT  180
     NGQPTEDNIH  DCSKLKSPLG  VKWHTAVTYV  NSCLFVAVLV  ILIGCYIAIS  RYIHKSSRQF  240
     ISQSSRKRKH  NQSIRVVVAV  FFTCFLPYHL  CRIPFTFSHL  DRLLDESAQK  ILYCKEITL   300
     FLSACNVCLD  PIIYFFMCRS  FSRRLFKKSN  IRTRSESIRS  LQSVRRSEVR  IYYDYTDV    358
```

Seq ID NO: C308 Protein Sequence
Protein Accession #: NP_065840.1

```
     1          11          21          31          41          51
     |          |           |           |           |           |
     MVWCLGLAVL  SLVISQGADG  RGKPEVVSVV  GRABESVVLG  CDLLPPAGRP  PLHVIEWLRF  60
     GPLLPIFIQF  GLYSPRIDPD  YVGRVRLQKG  ASLQIEGLRV  EDQGWYECRV  PFLDQHIPED  120
     DFANGSWVHL  TVNSPPQFQB  TPPAVLEVQE  LEPVTLRCVA  RGSPLPHVTW  KLRGKDLGQG  180
     QGGVQVQNGT  LRIRRVERGS  SGVYTCQASS  TEGSATHATQ  LLVLGPPVIV  VPPKNSTVNA  240
     SQDVSLACHA  EAYPANLTYS  WFQDNINVFH  ISRLQPRVQI  LVDGSLRLLA  TQPDDAGCYT  300
     CVPSNGLLHP  PSASAYLTVL  CMPGVIRCPV  RANPPLLFVS  WTKDGKALQL  DKFPGWSQGT  360
     EGSLIIALGN  EDALGEYSCT  PYNSLGTAGP  SPVTRVLLKA  PPAFIERPKE  EYFQEVGREL  420
     LIPCSAQGDP  PPVVSWTKVG  RGLQGQAQVD  SNSSLILRPL  TKEAHGHWEC  SASNAVARVA  480
     TSTNVYVLGT  SPHVVTNVSV  VALPKGANVS  WEPGFDGGYL  QRFSVWYTPL  AKRPDRMHHD  540
     WVSLAVPVGA  AHLLVPGLQP  HTQYQFSVLA  QNKLGSGPFS  EIVLSAPEGL  PTTPAAPGLP  600
     PTEIPPPLSP  PRGLVAVRTP  RGVLLHWDPP  ELVPKRLDGY  VLEGRQGSQG  WEVLDPAVAG  660
     TETELLVPGL  IKDVLYEFRL  VAFAGSFVSD  PSNTANVSTS  GLEVYPSRTQ  LPGLLPQPVL  720
     AGVVGGVCFL  GVAVLVSILA  GCLLNRRRAA  RRRRKRLRQD  PPLIFSPTGK  SAAPSALGSG  780
     SPDSVAKLKL  QGSPVPSLRQ  SLLWGDPAGT  PSPHPDPPSS  RGPLPLEPIC  RGPDGRFVMG  840
     PTVAAPQERS  GREQAEPRTP  AQRLARSFDC  SSSSPSGAPQ  PLCIEDISPV  APPPAAPPSP  900
     LPGPGPLLQY  LSLPPFPREMN  VDGDWPPLEE  PSPAAPPDYM  DTRRCPTSSF  LRSPETPPVS  960
     PRESLPGAVV  GAGATAEPPY  TALADWTLRE  RLLPGLLPAA  PRGSLTSQSS  GRGSASFLRP  1020
     PSTAPSAGGS  YLSPAPGDTS  SWASGPERWP  RREHVVTVSK  RRNTSVDENY  EWDSEFPGDM  1080
     ELLETLHLGL  ASSRLRPEAE  TELGVKTPEE  GCLLNTAHVT  GPEARCAALR  EEFLAFRRRR  1140
     DATRARLPAY  RQPVPHPEQA  TLL                                           1163
```

Seq ID NO: C309 Protein Sequence
Protein Accession #:

```
     1          11          21          31          41          51
     |          |           |           |           |           |
     MLTKPLQGPP  APPGTPTPPP  GGKDREAFEA  EYRLGPLLGK  GGFGTVFAGH  RLTDRLQVAI  60
     KVIPRNRVLG  WSPLSDSVTC  PLEVALLWKV  GAGGGHPGVI  RLLDWFETQE  GFMLVLERPL  120
     PAQDLFDYIT  EKGPLGEGPS  RCFPGQVVAA  IQHCHSRGVV  HRDIKDENIL  IDLRRGCAKL  180
     IDFGSGALLH  DEPYTDFDGT  RVYSPPEWIS  RHQYHALPAT  VWSLGILLYD  MVCGDIPFER  240
     DQEILEAELH  FPAHVSPDCC  ALIRRCLAPK  PSSRPSLEEI  LLDPWMQTPA  EDVTPQPLQR  300
     RPCPFGLVLA  TLSLAWPGLA  PNGQKSHPMA  MSQG                              334
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Seq ID NO: C310 Protein Sequence
Protein Accession #: NP_002501.1

```
     1          11          21          31          41          51
     |          |           |           |           |           |
     MECLYYFLGF  LLLAARLPLD  AAKRFHDVLG  NERPSAYMRE  HNQLNGWSSD  ENDWNEKLYP  60
     VWKRGDMRWK  NSWKGGRVQA  VLTSDSPALV  GSNITFAVNL  IFPRCQKEDA  NGNIVYEKNC  120
     RNEAGLSADP  YVYNWTAWSE  DSDGENGTGQ  SHHNVPPDGK  PFPHHPGWRR  WNFIYVPHTL  180
     GQYFQKLGRC  SVRVSVNTAN  VTLGPQLMEV  TVYRRHGRAY  VPIAQVKDVY  VVTDQIPVFV  240
     TMFQKNDRNS  SDETFLKDLP  IMPDVLIHDP  SHFLNYSTIN  YKWSFGDNTG  LFVSTNHTVN  300
     HTYVLNGTFS  LNLTVKAAAP  GPCPPPPPPP  RPSKPTPSLG  PAGDNPLELS  RIPDENCQIN  360
     RYGHFQATIT  IVEGILEVNI  IQMTDVLMPV  PWPESSLIDF  VVTCQGSIPT  EVCTIISDPT  420
     CEITQNTVCS  PVDVDEMCLL  TVRRTFNGSG  TYCVNLTLGD  DTSLALTSTL  ISVPDRDPAS  480
     PLRMANSALI  SVGCLAIFVT  VISLLVYKKH  KEYNPIENSP  GNVVRSKGLS  VFLNRAKAVF  540
     FPGNQEKDPL  LKNQEFKGVS                                                560
```

Seq ID NO: C311 Protein Sequence
Protein Accession #: Eos seq

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     1          11          21          31          41          51
     |          |           |           |           |           |
     MRILKRFLAC  IQLLCVCRLD  WANGYYRQQR  KLVEEIGWSY  TGALNQKNWG  KKYPTCNSPK  60
     QSPINIDEDL  TQVNVNLKKL  KPQGWDKTSL  ENTPIHNTGK  TVEINLTNDY  RVSGGVSEMV  120
     PKASKITFHW  GKCNMSSDGS  EHSLEGQKFP  LEMQIYCFDA  DRFSSFEEAV  KGKGKLRALS  180
     ILFEVGTEEN  LDFKAIIDGV  ESVSRFGKQA  ALDPFILLNL  LPNSTDKYYI  YNGSLTSPPC  240
     TDTVDWIVFK  DTVSISESQL  AVFCEVLTMQ  QSGYVMLMDY  LQNNFREQQY  KFSRQVFSSY  300
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        TGKEEIHEAV CSSEPENVQA DPENYTSLLV TWERPRVVYD TMIEKFAVLY QQLDGEDQTK    360
        HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPELDLFPE    420
        LIGTEEIIKE EEEGKDIEEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNRI GTKYNEAKTN    480
        RSPTRGSEFS GKGDVPNTSL NSTSQPVTKL ATEKDISLTS QTVTELPPHT VEGTSASLND    540
5       GSKTVLRSPH MNLSGTAESL NTVSITEYEE ESLLTSFKLD TGAEDSSGSS PATSAIPPIS    600
        ENISQGYIFS SENPETITYE VLIPESARNA SEDSTSSGSE ESLKDPSMEG NVWFPSSTDI    660
        TAQPDVGSGR ESFLQTNYTE IRVDESEKTT KSFSAGPVMS QGPSVTDLEM PHYSTFAYFP    720
        TEVTPHAFTP SSRQQDLVST VNVVYSQTTQ PVYNEASNSS HESRIGLAEG LESEKKAVIP    780
        LVIVSALTFI CLVVLVGILI YWRKCFQTAH FYLEDSTSPR VISTPPTPIF PISDDVGAIP    840
10      IKHFPKHVAD LHASSGFTEE FEEVQSCTVD LGITADSSNH PDNKHKNRYI NIVAYDHSRV    900
        KLAQLAEKDG KLTDYINANY VDGYNRPKAY IAAQGPLKST AEDFWRMIWE HNVEVIVMIT    960
        NLVEKGRRKC DQYWPADGSE EYGNFLVTQK SVQVLAYYTV RNPTLRNTKI KKGSQKGRPS   1020
        GRVVTQYHYT QWPDMGVPEY SLPVLTFVRK AAYAKRHAVG PVVVHCSAGV GRTGTYIVLD   1080
        SMLQQIQHEG TVNIFGFLKH IRSQRNYLVQ TEEQYVPIHD TLVEAILSKE TEVLDSHIHA   1140
15      YVNALLIPGP AGKTKLEKQF QLLSQSNIQQ SDYSAALKQC NREKNRTSSI IPVERSRVGI   1200
        SSLSGEGTDY INASYIMGYY QSNBPIITQH PLLHTIKDFW RMIWDHNAQL VVMIPDGQNM   1260
        AEDEFVYWPN KDEPINCESF KVTLMAEEHK CLSNEEKLII QDFILEATQD DYVLEVRHFQ   1320
        CPKWPNPDSP ISKTFELISV IKEEAANRDG PMIVHDEHGG VTAGTFCALT TLMHQLEKEN   1380
        SVDVYQVAKM INLMRPGVFA DIEQYQFLYK VILSLVSTRQ EENPSTSLDS NGAALPDGNI   1440
20      AESLESLV                                                           1448
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Seq ID NO: C312 Protein Sequence
Protein Accession #: XP_031379

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25      1          11         21         31         41         51
        |          |          |          |          |          |
        MRILKRFLAC IQLLCVCRLD WANGYYRQQR KLVEEIGWSY TGALNQKNWG KKYPTCNSPK    60
        QSPINIDEDL TQVNVNLKKL KFQGWDKTSL ENTFIHNTGK TVEINLTNDY RVSGGVSEMV   120
        FKASKITFHW GKCNMSSDGS EHSLEGQKFP LEMQIYCFDA DRFSSFEEAV KGKGKLRALS   180
30      ILFEVGTEEN LDFKAIIDGV ESVSRFGKQA ALDPPFILLNL LPNSTDKYYI YNGSLTSPPC   240
        TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVMLMDY LQNNFREQQY KFSRQVFSSY   300
        TGKEEIHEAV CSSEPENVQA DPENYTSLLV TWERPRVVYD TMIEKFAVLY QQLDGEDQTK    360
        HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPELDLFPE    420
        LIGTEEIIKE EEEGKDIEEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNRI GTKYNEAKTN    480
35      RSPTRGSEFS GKGDVPNTSL NSTSQPVTKL ATEKDISLTS QTVTELPPHT VEGTSASLND    540
        GSKTVLRSPH MNLSGTAESL NTVSITEYEE ESLLTSFKLD TGAEDSSGSS PATSAIPPIS    600
        ENISQGYIFS SENPETITYD VLIPESARNA SEDSTSSGSE ESLKDPSMEG NVWFPSSTDI    660
        TAQPDVGSGR ESFLQTNYTE IRVDESEKTT KSFSAGPVMS QGPSVTDLEM PHYSTFAYFP    720
        TEVTPHAFTP SSRQQDLVST VNVVYSQTTQ PVYNGETPLQ PSYSSEVPPL VTPLLLDNQI    780
40      LNTTPAASSS DSALHATPVF PSVDVSPESI LSSYDGAPLL PFSSASFSSE LFRHLHTVSQ    840
        ILPQVTSATE SDKVPLHASL PVAGGDLLLE PSLAQYSDVL STTHAASBTL EPGSESGVLY    900
        KTLMFSQVEP PSSDAMMHAR SSGPEPSYAL SDNEGSQHIP TVSYSSAIPV HDSVGVTYQG    960
        SLFSGPSHIP IPKSSLITPT ASLLQPTHAL SGDGEWSGAS SDSEFLLPDT DGLTALNISS   1020
        PVSVAEFTYT TSVFGDDNKA LSKSEIIYGN ETELQIPSFN EMVYPSESTV MPNMYDNVNK   1080
45      LNASLQETSV SISSTKGMFP GSLAHTTTKV FDHEISQVPE NNFSVQPTHT VSQASGDTSL   1140
        KPVLSANSEP ASSDPASSEM LSPSTQLLFY ETSASFSTEV LLQPSFQASD VDTLLKTVLP   1200
        AVPSDPILVE TPKVDKISST MLHLIVSNSA SSENMLHSTS VPVFDVSPTS HMHSASLQGL   1260
        TISYASEKYE PVLLKSESSH QVVPSLYSND ELFQTANLEI NQAHPPKGRH VFATPVLSID   1320
        EPLNTLINKL IHSDBILTST KSSVTGKVFA GIPTVASDTF VSTDHSVPIG NGHVAITAVS   1380
50      PHRDGSVTST KLLFPPSKATS ELSHSAKSDA GLVGGGEDGD TDDDGDDDDD DRGSDGLSIH   1440
        KCMSCSSYRE SQBKVMNDSD THENSLMDQN NPISYSLSEN SEEDNRVTSV SSDSQTGMDR   1500
        SPGKSPSANG LSQKHNDGKE ENDIQTGSAL LPLSPESKAW AVLTSDBESG SGQGTSDSLN   1560
        ENBTSTDFSP ADTNBKDADG ILAAGDSEIT PGFPQSPTSS VTSENSEVFH VSEAEASNSS   1620
        HESRIGLAEG LESEKKAVIP LVIVSALTFI CLVVLVGILI YWRKCFQTAH FYLEDSTSPR   1680
55      VISTPPTPIF PISDDVGAIP IKHFPKHVAD LHASSGFTEB FETLKEFYQE VQSCTVDLGI   1740
        TADSSNHPDN KHKNRYINIV AYDHSRVKLA QLAEKDGKLT DYINANYVDG YNRPKAYIAA   1800
        QGPLKSTAED FWRMIWEHNV EVIVMITNLV EKGRRKCDQY WPADGSEEYG NFLVTQKSVQ   1860
        VLAYYTVRNP TLRNTKIKKG SQKGRPSGRV VTQYHYTQWP DMGVPEYSLP VLTFVRKAAY   1920
        AKRHAVGPVV VHCSAGVGRT GTYIVLDSML QQIQHEGTVN IFGFLKHIRS QRNYLVQTEE   1980
60      QYVPIHDTLV EAILSKETEV LDSHIHAYVN ALLIPGPAGK TKLEKQFQLL SQSNIQQSDY   2040
        SAALKQCNRE KNRTSSIIPV ERSRVGISSL SGEGTDYINA SYIMGYYQSN EFIITQHPLL   2100
        HTIKDFWRMI WDHNAQLVVM IPDGQNMAED EFVYWPNKDE PINCESFKVT LMAEEHKCLS   2160
        NEEKLIIQDF ILEATQDDYV LEVRHFQCPK WPNPDSPISK TFELISVIKE EAANRDGPMI   2220
        VHDEHGGVTA GTFCALTTLM HQLEKENSVD VYQVAKMINL MRPGVFADIE QYQFLYKVIL   2280
65      SLVSTRQBEN PSTSLDSNGA ALPDGNIAES LESLV                             2315
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Seq ID NO: C313 Protein Sequence
Protein Accession #: NP_002842

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        FKASKITFHW GKCNMSSDGS EHSLEGQKFP LEMQIYCFDA DRFSSFEEAV KGKGKLRALS   180
75      ILFEVGTEEN LDFKAIIDGV ESVSRFGKQA ALDPPFILLNL LPNSTDKYYI YNGSLTSPPC   240
        TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVMLMDY LQNNFREQQY KFSRQVFSSY   300
        TGKEEIHEAV CSSEPENVQA DPENYTSLLV TWERPRVVYD TMIEKFAVLY QQLDGEDQTK    360
        HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPELDLFPE    420
        LIGTEEIIKE EEEGKDIEEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNRI GTKYNEAKTN    480
80      RSPTRGSEFS GKGDVPNTSL NSTSQPVTKL ATEKDISLTS QTVTELPPHT VEGTSASLND    540
        GSKTVLRSPH MNLSGTAESL NTVSITEYEE ESLLTSFKLD TGAEDSSGSS PATSAIPPIS    600
        ENISQGYIFS SENPETITYD VLIPESARNA SEDSTSSGSE ESLKDPSMEG NVWFPSSTDI    660
        TAQPDVGSGR ESFLQTNYTE IRVDESEKTT KSFSAGPVMS QGPSVTDLEM PHYSTFAYFP    720
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 5     VEVIVMITNL VEKGRRKCDQ YWPADGSEEY GNFLVTQKSV QVLAYYTVRN FTLRNTKIKK  1020
       GSQKGRPSGR VVTQYHYTQW PDMGVPEYSL PVLTFVRKAA YAKRHAVGPV VVHCSAGVGR  1080
       TGTYIVLDSM LQQIQHEGTV NIFGFLKHIR SQRNYLVQTE EQYVFIHDTL VEAILSKETE  1140
       VLDSHIHAYV NALLIPGPAG KTKLEKQFQL LSQSNIQQSD YSAALKQCNR EKNRTSSIIP  1200
       VERSRVGISS LSGEGTDYIN ASYIMGYYQS NEFIITQHPL LHTIKDFWRM IWDHNAQLVV  1260
10     MIPDGQNMAE DEFVYWPNKD EPINCESFKV TLMAEEHKCL SNEEKLIIQD FILEATQDDY  1320
       VLEVRHFQCP KWPNPDSPIS KTFELISVIK EEAANRDGPM IVHDEHGGVT AGTFCALTTL  1380
       MHQLEKENSV DVYQVAKMIN LMRPGVFADI EQYQFLYKVI LSLVSTRQEE NPSTSLDSNG  1440
       AALPDGNIAE SLESLV                                                 1456
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       MVFKASKITF HWGKCNMSSD GSEHSLEGQK FPLEMQIYCF DADRFSSFEE AVKGKGKLRA   180
       LSILPEVGTB ENLDFKAIID GVESVSRFGK QAALDPFILL NLLPNSTDKY YIYNGSLTSP   240
       PCTDTDWIVF KDTVSISESQ LAVFCEVLTM QQSGYVMLMD YLQNNFREQQ YKFSRQVFSS   300
       YTGKEEIHEA VCSSEPENVQ ADPENYTSLL VTWERPRVVY DTMIEKFAVL YQQLDGEDQT   360
       KHEFLTDGYQ DLGAILNNLL PNMSYVLQIV AICTNGLYGK YSDQLIVDMP TDNPELDLFP   420
       ELIGTEEIIK EEEEGKDIEE GAIVNPGRDS ATNQIRKKEP QISTTTHYNR IGTKYNEAKT   480
       NRSPTRGSEF SGKGDVPNTS LNSTSQPVTK LATEKDISLT SQTVTELPPH TVEGTSASLN   540
       DGSKTVLRSP HMNLSGTAES LNTVSITEYE EESLLTSFKL DTGAEDSSGS SPATSAIPPI   600
       SENISQGYIF SSENPETITY DVLIPESARN ASEDSTSSGS EESLKDPSME GNVWFPSSTD   660
       ITAQPDVGSG RESFLQTNYT EIRVDESEKT TKSFSAGPVM SQGPSVTDLE MPHYSTFAYF   720
       PTEVTPHAFT PSSRQQDLVS TVNVVYSQTT QPVYNEASNS SHESRIGLAB GLESEKKAVI   780
       PLVIVSALTF ICLVVLVGIL IYWRKCFQTA HFYLEDSTSP RVISTPPTPI FPISDDVGAI   840
       PIKHFPKHVA DLHASSGFTE EFETLKEFYQ EVQSCTVDLG ITADSSNHPD NKHKNRYINI   900
       VAYDHSRVKL AQLAEKDGKL TDYINANYVD GYNRPKAYIA AQGPLKSTAE DFWRMIWEHN   960
35     VEVIVMITNL VEKGRRKCDQ YWPADGSEEY GNFLVTQKSV QVLAYYTVRN FTLRNTKIKK  1020
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       TGTYIVLDSM LQQIQHEGTV NIFGFLKHIR SQRNYLVQTE EQYVFIHDTL VEAILSKETE  1140
       VLDSHIHAYV NALLIPGPAG KTKLEKQFQL LSQSNIQQSD YSAALKQCNR EKNRTSSIIP  1200
       VERSRVGISS LSGEGTDYIN ASYIMGYYQS NEFIITQHPL LHTIKDFWRM IWDHNAQLVV  1260
40     MIPDGQNMAE DEFVYWPNKD EPINCESFKV TLMAEEHKCL SNEEKLIIQD FILEATQDDY  1320
       VLEVRHFQCP KWPNPDSPIS KTFELISVIK EEAANRDGPM IVHDEHGGVT AGTFCALTTL  1380
       MHQLEKENSV DVYQVAKMIN LMRPGVFADI EQYQFLYKVI LSLVSTRQEE NPSTSLDSNG  1440
       AALPDGNIAE SLESLV                                                 1456
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       FKASKITFHW GKCNMSSDGS EHSLEGQKFP LEMQIYCFDA DRFSSFEEAV KGKGKLRALS   180
       ILPEVGTEEN LDPKAIIDGV ESVSRFGKQA ALDPPILLNL LPNSTDKYYI YNGSLTSPPC   240
       TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVMLMDY LQNNFREQQY KFSRQVFSSY   300
       TGKEEIHEAV CSSEPENVQA DPENYTSLLV TWERPRVVYD TMIEKFAVLY QQLDGEDQTK   360
       HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPELDLFPE   420
       LIGTEEIIKE EEEGKDIEEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNRI GTKYNEAKTN   480
       RSPTRGSEFS GKGDVPNTSL NSTSQPVTKL ATEKDISLTS QTVTELPPHT VEGTSASLND   540
       GSKTVLRSPH MNLSGTAESL NTVSITEYEE ESLLTSFKLD TGAEDSSGSS PATSAIPPIS   600
       ENISQGYIFS SENPETITYD VLIPESARNA SEDSTSSGSE ESLKDPSMEG NVWFPSSTD   660
       TAQPDVGSGR ESFLQTNYTE IRVDESEKTT KSFSAGPVMS QGPSVTDLEM PHYSTFAYFP   720
       TEVTPHAFTP SSRQQDLVST VNVVYSQTTQ PVYNEASNSS HESRIGLAEG LESEKKAVIP   780
       LVIVSALTPI CLVVLVGILI YWRKCFQTAH FYLEDSTSPR VISTPPTPIF PISDDVGAIP   840
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65     AYDHSRVKLA QLAEKDGKLT DYINANYVDG YNRPKAYIAA QGPLKSTAED FWRMIWEHNV   960
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       GTYIVLDSML QQIQHEGTVN IFGFLKHIRS QRNYLVQTEE QYVFIHDTLV EAILSKETEV  1140
       LDSHIHAYVN ALLIPGPAGK TKLEKQFQGL TLSPRLECRG TISAHCNLPL PGLTDPPTSA  1200
70     SRVAGTILLS QSNIQQSDYS AALKQCNREK NRTSSIIPVE RSRVGISSLS GEGTDYINAS  1260
       YIMGYYQSNE FIITQHPLLH TIKDFWRMIW DHNAQLVVMI PDGQNMAEDE FVYWPNKDEP  1320
       INCESFKVTL MAEEHKCLSN EEKLIIQDPI LEATQDDYVL EVRHFQCPKW PNPDSPISKT  1380
       FELISVIKEE AANRDGPMIV HDEHGGVTAG TFCALTTLMH QLEKENSVDV YQVAKMINLM  1440
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       FKASKITFHW GKCNMSSDGS EHSLEGQKFP LEMQIYCFDA DRFSSPEEAV KGKGKLRALS   180
       ILPEVGTEEN LDFKAIIDGV ESVSRFGKQA ALDPFILLNL LPNSTDKYYI YNGSLTSPPC   240
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      TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVMLMDY LQNNFREQQY KFSRQVFSSY    300
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      HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPEASNSSH    420
      ESRIGLAEGL ESEKKAVIPL VIVSALTFIC LVVLVGILIY WRKCFQTAHP YLEDSTSPRV    480
  5   ISTPPTPIFP ISDDVGAIPI KHFPKHVADL HASSGFTEEP ETLKEFYQEV QSCTVDLGIT    540
      ADSSNHPDNK HKNRYINIVA YDHSRVKLAQ LAEKDGKLTD YINANYVDGY NRPKAYIAAQ    600
      GPLKSTAEDF WRMIWEHNVE VIVMITNLVE KGRRKCDQYW PADGSEEYGN FLVTQKSVQV    660
      LAYYTVRNFT LRNTKIKKGS QKGRPSGRVV TQYHYTQWPD MGVPEYSLPV LTFVRKAAYA    720
      KRHAVGPVVV HCSAGVGRTG TYIVLDSMLQ QIQHEGTVNI FGFLKHIRSQ RNYLVQTEEQ    780
 10   YVFIHDTLVE AILSKETEVL DSHIHAYVNA LLIPGPAGKT KLEKQFQLLS QSNIQQSDYS    840
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      TIKDFWRMIW DHNAQLVVMI PDGQNMAEDE FVYWPNKDEP INCESFKVTL MAEEHKCLSN    960
      EEKLIIQDFI LEATQDDYVL EVRHFQCPKW PNPDSPISKT FELISVIKEE AANRDGPMIV   1020
      HDEHGGVTAG TFCALTTLMH QLEKENSVDV YQVAKMINLM RPGVFADIEQ YQFLYKVILS   1080
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Seq ID NO: C317 Protein Sequence
Protein Accession #: Eos sequence

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      FKASKITFHW GKCNMSSDGS EHSLEGQKFP LEMQIYCFDA DRFSSFEEAV KGKGKLRALS    180
 25   ILFEVGTEEN LDFKAIIDGV ESVSRFGKQA ALDPPILLNL LPNSTDKYYI YNGSLTSPPC    240
      TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVMLMDY LQNNFREQQY KFSRQVFSSY    300
      TGKEEIHEAV CSSEPENVQA DPENYTSLLV TWERPRVVYD TMIEKFAVLY QQLDGEDQTK    360
      HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPELDLFPE    420
      LIGTEEIIKE EEEGKDIEEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNRI GTKYNEAKTN    480
 30   RSPTRGSEFS GKGDVPNTSL NSTSQPVTKL ATEKDISLTS QTVTELPPHT VEGTSASLND    540
      GSKTVLRSPH MNLSGTAESL NTVSITEYEE ESLLTSPKLD TGAEDSSGSS PATSAIPFIS    600
      ENISQGYIFS SENPETITYD VLIPESARNA SEDSTSSGSE ESLKDPSMEG NVWFPSSTDI    660
      TAQPDVGSGR ESFLQTNYTE IRVDESEKTT KSFSAGPVMS QGPSVTDLEM PHYSTFAYFP    720
      TEVTPHAFIP SSRQQDLVST VNVVYSQTTQ PVYNEASNSS HESRIGLAEG LESEKKAVIP    780
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      IKHPPKHVAD LHASSGPTEE FETLKEFYQE VQSCTVDLGI TADSSNHPDN KHKNRYINIV    900
      AHDHSRVKLA QLAEKDGKLT DYINANYVDG YNRPKAYIAA QGPLKSTAED FWRMIWEHNV    960
      EVIVMITNLV EKGRRKCDQY WPADGSEEYG NFLVTQKSVQ VLAYYTVRNF TLRNTKIKKG   1020
      SQKGRPSGRV VTQYHYTQWP DMGVPEYSLP VLTFVRKAAY AKRHAVGPVV VHCSAGVGRT   1080
 40   GTYIVLDSML QQIQHEGTVN IFGFLKHIRS QRNYLVQTEE QYVFIHDTLV EAILSKETEV   1140
      LDSHIHAYVN ALLIPGPAGK TKLEKQFQGL TLSPRLECRG TISAHCNLPL PGLTDPPTSA   1200
      SRVARTILLS QSNIQQSDYS AALKQCNREK NRTSSIIPVE RSRVGISSLS GEGTDYINAS   1260
      YIMGYYQSNE FIITQHPLLH TIKDFWRMIW DHNAQLVVMI PDGQNMAEDE FVYWPNKDEP   1320
      INCESFKVTL MAEEHKCLSN EEKLIIQDFI LEATQDDYVL EVRHFQCPKW PNPDSPISKT   1380
 45   FELISVIKEE AANRDGPMIV HDEHGGVTAG TFCALTTLMH QLEKENSVDV YQVAKMINLM   1440
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Seq ID NO: C318 Protein Sequence
Protein Accession #: Eos sequence

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 55   FKASKITFHW GKCNMSSDGS EHSLEGQKFP LEMQIYCFDA DRFSSFEBAV KGKGKLRALS    180
      ILFEVGTEEN LDFKAIIDGV ESVSRFGKQA ALDPPILLNL LPNSTDKYYI YNGSLTSPPC    240
      TDTVDWIVFK DTVSISESQL AVFCEVLTMQ QSGYVMLMDY LQNNFREQQY KFSRQVFSSY    300
      TGKEEIHEAV CSSEPENVQA DPENYTSLLV TWERPRVVYD TMIEKFAVLY QQLDGEDQTK    360
      HEFLTDGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGKY SDQLIVDMPT DNPELDLFPE    420
 60   LIGTEEIIKE EEEGKDIEEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNRI GTKYNEAKTN    480
      RSPTRGSEFS GKGDVPNTSL NSTSQPVTKL ATEKDISLTS QTVTELPPHT VEGTSASLND    540
      GSKTVLRSPH MNLSGTAESL NTVSITEYEE ESLLTSPKLD TGAEDSSGSS PATSAIPFIS    600
      ENISQGYIFS SENPETITYD VLIPESARNA SEDSTSSGSE ESLKDPSMEG NVWFPSSTDI    660
      TAQPDVGSGR ESFLQTNYTE IRVDESEKTT KSFSAGPVMS QGPSVTDLEM PHYSTFAYFP    720
 65   TEVTPHAFTP SSRQQDLVST VNVVYSQTTQ PVYNEASNSS HESRIGLAEG LESEKKAVIP    780
      LVIVSALTPI CLVVLVGILI YWRKCFQTAH FYLEDSTSPR VISTPPTPIF PISDDVGAIP    840
      IKHPPKHVAD LHASSGPTEE FETLKEFYQE VQSCTVDLGI TADSSNHPDN KHKNRYINIV    900
      AYDHSRVKLA QLAEKDGKLT DYINANYVDG YNRPKAYIAA QGPLKSTAED FWRMIWEHNV    960
      EVIVMITNLV EKGRRKCDQY WPADGSEEYG NFLVTQKSVQ VLAYYTVRNF TLRNTKIKKG   1020
 70   SQKGRPSGRV VTQYHYTQWP DMGVPEYSLP VLTFVRKAAY AKRHAVGPVV VHCSAGVGRT   1080
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      LDSHIHAYVN ALLIPGPAGK TKLEKQFQLL SQSNIQQSDY SAALKQCNRE KNRTSSIIPV   1200
      ERSRVGISSL SGEGTDYINA SYIMGYYQSN EFIITQHPLL HTIKDFWRMI WDHNAQLVVM   1260
      IPDGQNMAED EFVYWPNKDE PINCESFKVT LMAEEHKCLS NEEKLIIQDF ILEATQAWRS   1320
 75   DGRNFLCSDN PYAPTRKRKF RGCLPGSQDD QSDEARSLC                          1359
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Seq ID NO: C319 Protein Sequence
Protein Accession #: XP_002914.4

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PVVAILGMIY NVIILGPTGF LGSAVPILFY PAMMFASRLT AYFRRKCVAA TDERVQKMNE    360
VLTYIKFIKM YAWVKAFSQS VQKIREEERR ILEKAGYFQS ITVGVAPIVV VIASVVTFSV    420
HMTLGFDLTA AQAFTVVTVP NSMTFALKVT PFSVKSLSEA SVAVDRFKSL FLMBEVHMIK    480
NKPASPHIKI EMKNATLAWD SSHSSIQNSP KLTPKMKKDK RASRGKKEKV RQLQRTEHQA    540
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KTSLISAILG QMTLLEGSIA ISGTFAYVAQ QAWILNATLR DNILFGKEYD EERYNSVLNS    660
CCLRPDLAIL PSSDLTEIGE RGANLSGGQR QRISLARALY SDRSIYILDD PLSALDAHVG    720
NHIFNSAIRK HLKSKTVLFV THQLQYLVDC DEVIFMKEGC ITERGTHEEL MNLNGDYATI    780
FNNLLLGETP PVEINSKKET SGSQKKSQDK GPKTGSVKKE KAVKPEEGQL VQLEEKGQGS    840
VPWSVYGVYI QAAGGPLAFL VIMALFMLNV GSTAFSTWWL SYWIKQGSGN TTVTRGNETS    900
VSDSMKDNPH MQYYASIYAL SMAVMLILKA IRGVVFVKGT LRASSRLHDE LFRRILRSPM    960
KFFDTTPTGR ILNRPSKDMD EVDVRLPFQA EMFIQNVILV FPCVGMIAGV FPWFLVAVGP   1020
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LDDNQAPFFL FTCAMRWLAV RLDLISIALI TTTGLMIVLM HGQIPPAYAG LAISYAVQLT   1140
GLFQPTVRLA SETEARFTSV ERINHYIKTL SLEAPARIKN KAPSPDWPQE GEVTFENAEM   1200
RYRENLPLVL KKVSFTIKPK EKIGIVGRTG SGKSSLGMAL FRLVELSGGC IKIDGVRISD   1260
IGLADLRSKL SIIPQEPVLF SGTVRSNLDP FNQYTEDQIW DALERTHMKE CIAQLPLKLE   1320
SEVMENGDNF SVGERQLLCI ARALLRHCKI LILDEATAAM DTETDLLIQE TIREAFADCT   1380
MLTIAHRLHT VLGSDRIMVL AQGQVVEFDT PSVLLSNDSS RFYAMFAAAE NKVAVKG      1437
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Seq ID NO: C320 Protein Sequence
Protein Accession #: NP_005679.1

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LDASMHSQLR ILDEEHPKGK YHHGLSALKP IRTTSKHQHP VDNAGLFSCM TPSWLSSLAR   120
VAHKKGELSM EDVWSLSKHE SSDVNCRRLB RLWQEELNEV GPDAASLRRV VWIFCRTRLI   180
LSIVCLMITQ LAGFSGPAFM VKHLLEYTQA TESNLQYSLL LVLGLLLTEI VRSWSLALTW   240
ALNYRTGVRL RGAILTMAFK KILKLKNIKE KSLGELINIC SNDGQRMPEA AAVGSLLAGG   300
PVVAILGMIY NVIILGPTGF LGSAVPILFY PAMMFASRLT AYFRRKCVAA TDERVQKMNE   360
VLTYIKFIKM YAWVKAFSQS VQKIREEERR ILEKAGYFQG ITVGVAPIVV VIASVVTFSV   420
HMTLGFDLTA AQAFTVVTVP NSMTFALKVT PFSVKSLSEA SVAVDRFKSL FLMBEVHMIK   480
NKPASPHIKI EMKNATLAWD SSHSSIQNSP KLTPKMKKDK RASRGKKEKV RQLQRTEHQA   540
VLAEQKGHLL LDSDERPSPE EEEGKHIHLG HLRLQRTLHS IDLEIQEGKL VGICGSVGSG   600
KTSLISAILG QMTLLEGSIA ISGTFAYVAQ QAWILNATLR DNILFGKEYD EERYNSVLNS   660
CCLRPDLAIL PSSDLTEIGE RGANLSGGQR QRISLARALY SDRSIYILDD PLSALDAHVG   720
NHIFNSAIRK HLKSKTVLFV THQLQYLVDC DEVIFMKEGC ITERGTHEEL MNLNGDYATI   780
FNNLLLGETP PVEINSKKET SGSQKKSQDK GPKTGSVKKE KAVKPEEGQL VQLEEKGQGS   840
VPWSVYGVYI QAAGGPLAFL VIMALFMLNV GSTAFSTWWL SYWIKQGSGN TTVTRGNETS   900
VSDSMKDNPH MQYYASIYAL SMAVMLILKA IRGVVFVKGT LRASSRLHDE LFRRILRSPM   960
KFFDTTPTGR ILNRPSKDMD EVDVRLPFQA EMFIQNVILV FPCVGMIAGV FPWFLVAVGP  1020
LVILFSVLHI VSRVLIRELK RLDNITQSPF LSHITSSIQG LATIHAYNKG QEFLHRYQBL  1080
LDDNQAPFFL FTCAMRWLAV RLDLISIALI TTTGLMIVLM HGQIPPAYAG LAISYAVQLT  1140
GLFQPTVRLA SETEARFTSV ERINHYIKTL SLEAPARIKN KAPSPDWPQE GEVTFENAEM  1200
RYRENLPLVL KKVSPTIKPK EKIGIVGRTG SGKSSLGMAL FRLVELSGGC IKIDGVRISD  1260
IGLADLRSKL SIIPQEPVLF SGTVRSNLDP FNQYTEDQIW DALERTHMKE CIAQLPLKLE  1320
SEVMENGDNF SVGERQLLCI ARALLRHCKI LILDEATAAM DTETDLLIQB TIREAFADCT  1380
MLTIAHRLHT VLGSDRIMVL AQGQVVEFDT PSVLLSNDSS RFYAMFAAAE NKVAVKG     1437
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Seq ID NO: C321 Protein Sequence
Protein Accession #: NP_005553.1

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1          11         21         31         41         51
|          |          |          |          |          |
MPALWLGCCL CFSLLLPAAR ATSRREVCDC NGKSRQCIFD RELHRQTGNG PRCLNCNDNT    60
DGIHCEKCKN GFYRHRERDR CLPCNCNSKG SLSARCDNSG RCSCKPGVTG ARCDRCLPGF   120
HMLTDAGCTQ DQRLLDSKCD CDPAGIAGPC DAGRCVCKPA VTGERCDRCR SGYYNLDGGN   180
PEGCTQCFCY GHSASCRSSA EYSVHKITST FHQDVDGWKA VQRNGSPARL QWSQRHQDVF   240
SSAQRLDPVY FVAPAKFLGN QQVSYGQSLS FDYRVDRGGR HPSAHDVILE GAGLRITAPL   300
MPLGKTLPCG LTKTYTPRLN EHPSNNWSPQ LSYFEYRRLL RNLTALRIRA TYGEYSTGYI   360
DNVTLISARP VSGAPAPWVE QCICPVGYKG QFCQDCASGY KRDSARLGPF GTCIPCNCQG   420
GGACDPDTGD CYSGDENPDI ECADCPIGFY NDPHDPRSCK PCPCHNGPSC SVMPETEEVV   480
CNNCPPGVTG ARCELCADGY FGDPFGEHGP VRPCQPCQCN NNVDPSASGN CDRLTGRCLK   540
CIHNTAGIYC DQCKAGYFGD PLAPNPADKC RACNCNPMGS EPVGCRSDGT CVCKPGFGGP   600
NCEHGAFSCP ACYNQVKIQM DQFMQQLQRM EALISKAQGG DGVVPDTELE GRMQQAEQAL   660
QDILRDAQIS EGASRSLGLQ LAKVRSQENS YQSRLDDLKM TVERVRALGS QYQNRVRDTH   720
RLITQMQLSL AESEASLGNT NIPASDHYVG PNGFKSLAQE ATRLAESHVE SASNMEQLTR   780
ETEDYSKQAL SLVRKALHEG VGSGSGSPDG AVVQGLVEKL EKTKSLAQQL TREATQAEIE   840
ADRSYQHSLR LLDSVSRLQG VSDQSPQVEB AKRIKQKADS LSTLVTRHMD EPKRTQKNLG   900
NWKEEAQQLL QNGKSGREKS DQLLSRANLA KSRAQEALSM GNATFYEVES ILKNLREFDL   960
QVDNRKAEAB EAMKRLSYIS QKVSDASDKT QQAERALGSA AADAQRAKNG AGEALEISSE  1020
IEQEIGSLNL EANVTADGAL AMEKGLASLK SEMREVEGEL ERKELEFDTN MDAVQMVITE  1080
AQKVDTRAKN AGVTIQDTLN TLDGLLHLMD QPLSVDEEGL VLLEQKLSRA KTQINSQLRP  1140
MMSELEERAR QQRGHLHLLE TSIDGILADV KNLENIRDNL PPGCYNTQAL EQQ         1193
```

Seq ID NO: C322 Protein Sequence
Protein Accession #: NP_066924.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MANAGLQLLG FILAFLGWIG AIVSTALPQW RIYSYAGDNI VTAQAMYEGL WMSCVSQSTG    60
```

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                    QIQCKVFDSL LNLSSTLQAT RALMVVGILL GVIAIFVATV GMKCMKCLED DEVQKMRMAV   120
                    IGGAIFLLAG LAILVATAWY GNRIVQEFYD PMTPVNARYE FGQALFTGWA AASLCLLGGA   180
                    LLCCSCPRKT TSYPTPRPYP KPAPSSGKDY V                                  211

5    Seq ID NO: C323 Protein Sequence
     Protein Accession #: AAM77876


          1          11         21         31         41         51
          |          |          |          |          |          |
10   MSSWIRWHGP AMARLWGFCW LVVGFWRAAF ACPTSCKCSA SRIWCSDPSP GIVAFPRLEP   60
     NSVDPENITE IFIANQKRLE IINEDDVEAY VGLRNLTIVD SGLKFVAHKA FLKNSNLQHI   120
     NFTRNKLTSL SRKHFRHLDL SELILVGNPP TCSCDIMWIK TLQEAKSSPD TQDLYCLNES   180
     SKNIPLANLQ IPNCGLPSAN LAAPNLTVEE GKSITLSCSV AGDPVPNMYW DVGNLVSKHM   240
     NETSHTQGSL RITNISSDDS GKQISCVAEN LVGEDQDSVN LTVHFAPTIT FLESPTSDHH   300
15   WCIPPTVKGN PKPALQWFYN GAILNESKYI CTKIHVTNHT EYHGCLQLDN PTHMNNGDYT   360
     LIAKNEYGKD EKQISAHFMG WPGIDDGANP NYPDVIYEDY GTAANDIGDT TNRSNEIPST   420
     DVTDKTGREH LSVYAVVVIA SVVGFCLLVM LFLLKLARHS KFGMKGFVLF HKIPLDG      477


20   Seq ID NO: C324 Protein Sequence
     Protein Accession #: NP_006171.1


          1          11         21         31         41         51
          |          |          |          |          |          |
25   MSSWIRWHGP AMARLWGFCW LVVGFWRAAF ACPTSCKCSA SRIWCSDPSP GIVAFPRLEP   60
     NSVDPENITE IFIANQKRLE IINEDDVEAY VGLRNLTIVD SGLKFVAHKA FLKNSNLQHI   120
     NFTRNKLTSL SRKHFRHLDL SELILVGNPP TCSCDIMWIK TLQEAKSSPD TQDLYCLNES   180
     SKNIPLANLQ IPNCGLPSAN LAAPNLTVEE GKSITLSCSV AGDPVPNMYW DVGNLVSKHM   240
     NETSHTQGSL RITNISSDDS GKQISCVAEN LVGEDQDSVN LTVHFAPTIT FLESPTSDHH   300
30   WCIPPTVKGN PKPALQWFYN GAILNESKYI CTKIHVTNHT EYHGCLQLDN PTHMNNGDYT   360
     LIAKNEYGKD EKQISAHFMG WPGIDDGANP NYPDVIYEDY GTAANDIGDT TNRSNEIPST   420
     DVTDKTGREH LSVYAVVVIA SVVGFCLLVM LFLLKLARHS KFGMKGPASV ISNDDDSASP   480
     LHHISNGSNT PSSSEGGPDA VIIGMTKIPV IENPQYFGIT NSQLKPDTFV QHIKRHNIVL   540
     KRELGEGAFG KVFLAECYNL CPEQDKILVA VKTLKDASDN ARKDFHREAE LLTNLQHEHI   600
35   VKFYGVCVEG DPLIMVFEYM KHGDLNKFLR AHGPDAVLMA EGNPPTELTQ SQMLHIAQQI   660
     AAGMVYLASQ HFVHRDLATR NCLVGENLLV KIGDFGMSRD VYSTDYYRVG GHTMLPIRWM   720
     PPESIMYRKF TTESDVWSLG VVLWEIFTYG KQPWYQLSNN EVIECITQGR VLQRPRTCPQ   780
     EVYELMLGCW QREPHMRKNI KGIHTLLQNL AKASPVYLDI LG                      822


40   Seq ID NO: C325 Protein Sequence
     Protein Accession #: Eos sequence


          1          11         21         31         41         51
          |          |          |          |          |          |
45   MSSWIRWHGP AMARLWGFCW LVVGFWRAAF ACPTSCKCSA SRIWCSDPSP GIVAFPRLEP   60
     NSVDPENITE IFIANQKRLE IINEDDVEAY VGLRNLTIVD SGLKFVAHKA FLKNSNLQHI   120
     NFTRNKLTSL SRKHFRHLDL SELILVGNPF TCSCDIMWIK TLQEAKSSPD TQDLYCLNES   180
     SKNIPLANLQ IPNCGLPSAN LAAPNLTVEE GKSITLSCSV AGDPVPNMYW DVGNLVSKHM   240
     NETSHTQGSL RITNISSDDS GKQISCVAEN LVGEDQDSVN LTVHFAPTIT FLESPTSDHH   300
50   WCIPPTVKGN PKPALQWFYN GAILNESKYI CTKIHVTNHT EYHGCLQLDN PTHMNNGDYT   360
     LIAKNEYGKD EKQISAHFMG WPGIDDGANP NYPDVIYEDY GTAANDIGDT TNRSNEIPST   420
     DVTDKTGREH LSVYAVVVIA SVVGFCLLVM LFLLKLARHS KFGMKGFVLF HKIPLDG      477


     Seq ID NO: C326 Protein Sequence
     Protein Accession #: NP_570843.1
55

          1          11         21         31         41         51
          |          |          |          |          |          |
     MPLKHYLLLL VGCQAWGAGL AYHGCPSECT CSRASQVECT GARIVAVPTP LPWNAMSLQI   60
     LNTHITELNE SPFLNISALI ALRIEKNELS RITPGAFRNL GSLRYLSLAN NKLQVLPIGL   120
60   FQGLDSLESL LLSSNQLLQI QPAHFSQCSN LKELQLHGNH LEYIPDGAFD HLVGLTKLNL   180
     GKNSLTHISP RVFQHLGNLQ VLRLYENRLT DIPMGTFDGL VNLQELALQQ NQIGLLSPGL   240
     FHNNHNLQRL YLSNNHISQL PPSIFMQLPQ LNRLTLFGNS LKELSLGIFG PMPNLRELWL   300
     YDNHISSLPD NVFSNLRQLQ VLILSRNQIS FISPGAFNGL TELRELSLHT NALQDLDGNV   360
     FRMLANLQNI SLQNNRLRQL PGNIPANVNG LMAIQLQNNQ LENLPLGIFD HLGKLCELRL   420
65   YDNFWRCDSD ILPLRNWLLL NQPRLGTDTV PVCFSPANVR GQSLIIINVN VAVPSVHVPE   480
     VPSYPETPWY PDTPSYPDTT SVSSTTELTS PVEDYTDLTT IQVTDDRSVW GMTQAQSGLA   540
     IAAIVIGIVA LACSLAACVG CCCCKKRSQA VLMQMKAPNE C                       581


70   Seq ID NO: C327 Protein Sequence
     Protein Accession #: NP_002649.1


          1          11         21         31         41         51
          |          |          |          |          |          |
75   MRALLARLLL CVLVVSDSKG SNELHQVPSN CDCLNGGTCV SNKYFSNIHW CNCPKKFGGQ   60
     HCEIDKSKTC YBGNGHFYRG KASTDTMGRP CLPWNSATVL QQTYHAHRSD ALQLGLGKHN   120
     YCRNPDNRRR PWCYVQVGLK PLVQECMVHD CADGKKPSSP PEELKFQCGQ KTLRPRFKII   180
     GGEFTTIENQ PWFAAIYRRH RGGSVTYVCG GSLISPCWVI SATHCFIDYP KKEDYIVYLG   240
     RSRLNSNTQG EMKFEVENLI LHKDYSADTL AHHNDIALLK IRSKEGRCAQ PSRTIQTICL   300
     PSMYNDPQFG TSCEITGFGK ENSTDYLYPE QLKMTVVKLI SHRECQQPHY YGSEVTTKML   360
80   CAADPQWKTD SCQGDSGGPL VCSLQGRMTL TGIVSWGRGC ALKDKPGVYT RVSHFLPWIR   420
     SHTKEENGLA L                                                       431


     Seq ID NO: C328 Protein Sequence
     Protein Accession #: XP_087254.1
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        1         11        21        31        41        51
        |         |         |         |         |         |
 5   MQFRECSING MKYQEINGRL VPEGPTPDSS EGNLSYLSSL SHLNNLSHLT TSSSPRTSPE    60
     NETELIKEHD LFFKAVSLCH TVQISNVQTD CTGDGPWQSN LAPSQLEYYA SSPDEKALVE   120
     AAARIGIVFI GNSEETMEVK TLGKLERYKL LHILEFDSDR RRMSVIVQAP SGEKLLFAKG   180
     AESSILPKCI GGEIEKTRIH VDEPALKGLR TLCIAYRKFT SKEYEEIDKR IFEARTALQQ   240
     REEKLAAVFQ FIEKDLILLG ATAVEDRLQD KVRETIEALR MAGIKVWVLT GDKHETAVSV   300
10   SLSCGHFHRT MNILELINQK SDSECAEQLR QLARRITEDH VIQHGLVVDG TSLSLALREH   360
     EKLFMEVCRN CSAVLCCRMA PLQKAKVIRL IKISPEKPIT LAVGDGANDV SMIQEAHVGI   420
     GIMGKEGRQA ARNSDYAIAR FKFLSKLLFV HGHFYYIRIA TLVQYFFYKN VCFITPQFLY   480
     QFYCLFSQQT LYDSVYLTLY NICFTSLPIL IYSLLEQHVD PHVLQNKPTL YRDISKNRLL   540
     SIKTFLYWTI LGFSHAFIPF FGSYLLIGKD TSLLGNGQMF GNWTFGTLVF TVMVITVTVK   600
15   MALETHPWTW INHLVTWGSI IFYFVFSLFY GGILWPFLGS QNMYFVFIQL LSSGSAWFAI   660
     ILMVVTCLFL DIIKKVFDRH LHPTSTEKAQ LTETNAGIKC LDSMCCFPEG EAACASVGRM   720
     LERVIGRCSP THISRSWSAS DPFYTNDRSI LTLSTMDSST C                      761


     Seq ID NO: C329 Protein Sequence
20   Protein Accession #: XP_087461.1


        1         11        21        31        41        51
        |         |         |         |         |         |
     MLPLLAALLA AACPLPPVRG GAADAPGLLG VPSNASVNAS SAASPSPRGC WPRRPPGPPS    60
25   ARARRRRRRR RRLCNISVQR QMLSSLLVRW GRPRGFQCDL LLFSTNAHGR AFFAAAFHRV   120
     GPPLLIEHLG LAAGGAQQDL RLCVGCGWVR GRRTGRLRPA APSAAAATA GAPTALPAYP   180
     AAEPPGPLWL QGEPLHPCCL DFSLEELQGE PGWRLNRKPI ESTLVACFMT LVIVVWSVAA   240
     LIWPVPIIAG FLPNGMEQRR TTASTTAATP AAVPAGTTAA AAAAAAAAA AVTSGVATK   299


     Seq ID NO: C330 Protein Sequence
30   Protein Accession #: XP_051522.2


        1         11        21        31        41        51
        |         |         |         |         |         |
     MDLHLFDYSE PGNFSDISWP CNSSDCIVVD TVMCPNMPNK SVLLYTLSFI YIFIFVIGMI    60
35   ANSVVVWVNI QAKTTGYDTH CYILNLAIAD LWVVLTIPVW VVSLVQHNQW PMGELTCKVT   120
     HLIFSINLFG SIFFLTCMSV DRYLSITYFT NTPSSRKKMV RRVVCILVWL LAFCVSLPDT   180
     YYLKTVTSAS NNETYCRSFY PEHSIKEWLI GMELVSVVLG FAVPFSIIAV FYFLLARAIS   240
     ASSDQEKHSS RKIIFSYVVV FLVCWLPYHV AVLLDIFSIL HYIPPFTCRLE HALFTALHVT   300
     QCLSLVHCCV NPVLYSFINR NYRYELMKAF IPKYSAKTGL TKLIDASRVS ETEYSALEQS   360
40   TK                                                                362


     Seq ID NO: C331 Protein Sequence
     Protein Accession #: NP_000341.1

        1         11        21        31        41        51
45      |         |         |         |         |         |
     MGFVRQIQLL LWKNWTLRKR QKIRFVVELV WPLSLFLVLI WLRNANPLYS HHECHFPNKA    60
     MPSAGMLPWL QGIFCNVNNP CFQSPTPGES PGIVSNYNNS ILARVYRDFQ ELLMNAPESQ   120
     HLGRIWTELH ILSQFMDTLR THPERIAGRG IRIRDILKDE ETLTLFLIKN IGLSDSVVYL   180
50   LINSQVRPEQ FAHGVPDLAL KDIACSEALL ERFIIFSQRR GAKTVRYALC SLSQGTLQWI   240
     EDTLYANVDF FKLFRVLPTL LDSRSQGINL RSWGGILSDM SPRIQEFIHR PSMQDLLWVT   300
     RPLMQNGGPE TFTKLMGILS DLLCGYPEGG GSRVLSFNWY EDNNYKAFLG IDSTRKDPIY  `360
     SYDRRTTSFC NALIQSLESN PLTKIAWRAA KPLLMGKILY TPDSPAARRI LKNANSTFEE   420
     LEHVRKLVKA WEEVGPQIWY FFDNSTQMNM IRDTLGNPTV KDFLNRQLGE EGITAEAILN   480
55   FLYKGPRESQ ADDMANFDWR DIFNITDRTL RLVNQYLECL VLDKFESYND ETQLTQRALS   540
     LLEENMFWAG VVFPDMYPWT SSLPPHVKYK IRMDIDVVEK TNKIKDRYWD SGPRADPVED   600
     FRYIWGGPAY LQDMVEQGIT RSQVQAEAPV GIYLQQMPYP CFVDDSFMII LNRCFPIFMV   660
     LAWIYSVSMT VKSIVLEKEL RLKETLKNQG VSNAVIWCTW FLDSFSIMSM SIFLLTIFIM   720
     HGRILHYSDP FILFLFLLAF STATIMLCFL LSTPFSKASL AAACSGVIYF TLYLPHILCF   780
60   AWQDRMTAEL KKAVSLLSPV AFGFGTEYLV RFEEQGLGLQ WSNIGNSPTE GDEFSFLLSM   840
     QMMLLDAACY GLLAWYLDQV FPGDYGTPLP WYFLLQESYW LSGEGCSTRE ERALEKTEPL   900
     TEETEDPEHP EGIHDSFFER EHPGWVPGVC VKNLVKIFEP CGRPAVDRLN ITFYENQITA   960
     FLGHNGAGKT TTLSILTGLL PPTSGTVLVG GRDIETSLDA VRQSLGMCPQ HNILPHHLTV  1020
     AEHMLFYAQL KGKSQEEAQL EMEAMLEDTG LHHKRNEEAQ DLSGGMQRKL SVAIAFVGDA  1080
65   KVVILDEPTS GVDPYSRRSI WDLLLKYRSG RTIIMPTHHM DEADHQGDRI AIIAQGRLYC  1140
     SGTPLFLKNC FGTGLYLTLV RKMKNIQSQR KGSEGTCSCS SKGFSTTCPA HVDDLTPEQV  1200
     LDGDVNELMD VVLHHVPEAK LVECIGQELI FLLPNKNFKH RAYASLFREL EETLADLGLS  1260
     SFGISDTPLE EIFLKVTEDS DSGPLFAGGA QQKRENVNPR HPCLGPREKA GQTPQDSNVC  1320
     SPGAPAAHPE GQPPPEPECP GPQLNTGTQL VLQHVQALLV KRFQHTIRSH KDFLAQIVLP  1380
70   ATFVFLALML SIVILPFGEY PALTLHPWIY GQQYTFFSMD ADVLLNKPGF  1440
     GNRCLKEGWL PEYPCGNSTP WKTPSVSPNI TQLFQKQKWT QVNPSPSCRC STREKLTMLP  1500
     ECPEGAGGLP PPQRTQRSTE ILQDLTDRNI SDFLVKTYPA LIRSSLKSKF WVNEQRYGGI  1560
     SIGGKLPVVP ITGEALVGFL SDLGRIMNVS GGPITREASK EIPDFLKHLE TEDNIKVWFN  1620
     NKGWHALVSF LNVAHNAILR ASLPKDRSPE EYGITVISQP LNLTKEQLSE ITVLTTSVDA  1680
75   VVAICVIFSM SFVPASFVLY LIQERVNKSK HLQFISGVSP TTYWVTNFLW DIMNYSVSAG  1740
     LVVGIFIGFQ KKAYTSPENL PALVALLLLY GWAVIPMMYP ASFLFDVPST AYVALSCANL  1800
     FIGINSSAIT PILELFDNNR TLLRFNAVLR KLLIVFPHFC LGRGLIDLAL SQAVTDVYAR  1860
     FGEEHSANPF HWDLIGKNLF AMVVEGVVYF LLTLLVQRHF FLSQWIAEPT KEPIVDEDDD  1920
     VAEERQRIIT GGNKTDILRL HELTKIYLGT SSPAVDRLCV GVRPGECFGL LGVNGAGKTT  1980
80   TPKMLTGDTT VTSGDATVAG KSILTNISEV HQNMGYCPQF DAIDELLTGR EHLYLYARLR  2040
     GVPAEEIEKV ANWSIKSLGL TVYADCLAGT YSGGNKRKLS TAIALIGCPP LVLLDEPTTG  2100
     MDPQARRMLW NVIVSIIRKG RAVVLTSHSM EECEALCTRL AIMVKGAFRC MGTIQHLKSK  2160
     FGDGYIVTMK IKSPKDDLLP DLNPVEQFFQ GNPPGSVQRE RHYNMLQFQV SSSSLARIFQ  2220
     LLLSHKDSLL IEEYSVTQTT LDQVFVNFAK QQTESHDLPL HPRAAGASRQ AQD         2273
```

Seq ID NO: C332 Protein Sequence
Protein Accession #: NP_006662.2

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5        1          11         21         31         41         51
         |          |          |          |          |          |
         MVPHAILARG RDVCRRNGLL ILSVLSVIVG CLLGFFLRTR RLSPQEISYF QFPGELLMRM   60
         LKMMILPLVV SSLMSGLASL DAKTSSRLGV LTVAYYLWTT FMAVIVGIFM VSIIHPGSAA  120
         QKETTEQSGK PIMSSADALL DLIRNMFPAN LVEATFKQYR TKTTPVVKSP KVAPEEAPPR  180
10       RILIYGVQEE NGSHVQNFAL DLTPPPEVVY KSEPGTSDGM NVLGIVFFSA TMGIMLGRMG  240
         DSGAPLVSFC QCLNESVMKI VAVAVWYPPF GIVFLIAGKI LEMDDPRAVG KKLGFYSVTV  300
         VCGLVLHGLF ILPLLYFFIT KKNPIVFIRG ILQALLIALA TSSSSATLPI TFKCLLENNH  360
         IDRRIARFVL PVGATINMDG TALYEAVAAI FIAQVNNYEL DFGQIITISI TATAASIGAA  420
         GIPQAGLVTM VIVLTSVGLP TDDITLIIAV DWALDRFRTM INVLGDALAA GIMAHICRKD  480
15       FARDTGTEKL LPCETKPVSL QEIVAAQQNG CVKSVAEASE LTLGPTCPHH VPVQVERDEE  540
         LPAASLNHCT IQISELETNV                                             560
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Seq ID NO: C333 Protein Sequence
Protein Accession #: NP_005680.1

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20       1          11         21         31         41         51
         |          |          |          |          |          |
         MVTVGNYCEA EGPVGPAWMQ DGLSPCFFPT LVPSTRMALG TLALVLALPC RRRERPAGAD   60
25       SLSWGAGPRI SPYVLQLLLA TLQAALPLAG LAGRVGTARG APLPSYLLLA SVLESLAGAC  120
         GLWLLVVERS QARQRLAMGI WIKPRHSPGL LLLWTVAFAA ENLALVSWNS PQHWWARADL  180
         GQQVQFSLWV LRYVVSGGLF VLGLWAPGLR PQSYTLQVHE EDQDVERSQV RSAAQQSTWR  240
         DFGRKLRLLS GYLWPRGSPA LQLVVLICLG LMGLERALNV LVPIFYRNIV NLLTEKAPWN  300
         SLAWTVTSYV FLKPLQGGGT GSTGFVSNLR TFLWIRVQQF TSRRVELLIF SHLHELSLRW  360
30       HLGRRTGEVL RIADRGTSSV TGLLSYLVFN VIPTLADIII GIIYFSMFFN AWFGLIVFLC  420
         MSLYLTLTIV VTEWRTKFRR AMNTQENATR ARAVDSLLNF ETVKYYNAES YEVERYREAI  480
         IKYQGLEWKS SASLVLLNQT QNLVIGLGLL AGSLLCAYFV TEQKLQVGDY VLFGTYIIQL  540
         YMPLNWFGTY YRMIQTNFID MENMFDLLKE ETEVKDLPGA GPLRFQKGRI EFENVHFSYA  600
         DGRETLQDVS FTVMPGQTLA LVGPSGAGKS TILRLLFRFY DISSGCIRID GQDISQVTQA  660
35       SLRSHIGVVP QDTVLFNDTI ADNIRYGRVT AGNDEVEAAA QAAGIHDAIM AFPEGYRTQV  720
         GERGLKLSGG EKQRVAIART ILKAPGIILL DEATSALDTS NERAIQASLA KVCANRTTIV  780
         VAHRLSTVVN ADQILVIKDG CIVERGRHEA LLSRGGVYAD MWQLQQGQEE TSEDTKPQTM  840
         ER                                                               842
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Seq ID NO: C334 Protein Sequence
Protein Accession #: NP_000667.1

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40       1          11         21         31         41         51
         |          |          |          |          |          |
         MLLETQDALY VALELVIAAL SVAGNVLVCA AVGTANTLQT PTNYFLVSLA AADVAVGLFA   60
45       IPFAITISLG FCTDFYGCLF LACFVLVLTQ SSIFSLLAVA VDRYLAICVP LRYKSLVTGT  120
         RARGVIAVLW VLAFGIGLTP FLGWNSKDSA TNNCTEPWDG TTNESCCLVK CLFENVVPMS  180
         YMVYFNPFGC VLPPLLIMLV IYIKIFLVAC RQLQRTELMD HSRTTLQREI HAAKSLAMIV  240
         GIFALCWLPV HAVNCVTLFQ PAQGKNKPKW AMNMAILLSH ANSVVNPIVY AYRNRDFRYT  300
         FHKIISRYLL CQADVKSGNG QAGVQPALGV GL                                332
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Seq ID NO: C335 Protein Sequence
Protein Accession #: NP_443164

```
55       1          11         21         31         41         51
         |          |          |          |          |          |
         MGLGARGAWA ALLLGTLQVL ALLGAAHESA AMAETLQHVP SDHTNETSNS TVKPPTSVAS   60
         DSSNTTVTTM KPTAASNTTT PGMVSTNMTS TTLKSTPKTT SVSQNTSQIS TSTMTVTHNS  120
         SVTSAASSVT ITTTMHSEAK KGSKFDTGSF VGGIVLTLGV LSILYIGCKM YYSRRGIRYR  180
60       TIDEHDAII                                                        189
```

Seq ID NO: C336 Protein Sequence
Protein Accession #: NP_004186.1

```
65       1          11         21         31         41         51
         |          |          |          |          |          |
         MAQHGAMGAF RALCGLALLC ALSLGQRPTG GPGCGPGRLL LGTGTDARCC RVHTTRCCRD   60
         YPGEECCSEW DCMCVQPEFH CGDPCCTTCR HHPCPPGQGV QSQGKFSFGF QCIDCASGTF  120
         SGGHEGHCKP WTDCTQFGPL TVFPGNKTHN AVCVPGSPPA EPLGWLTVVL LAVAACVLLL  180
         TSAQLGLHIW QLRSQCMWPR ETQLLLEVPP STEDARSCQF PEEERGERSA EEKGRLGDLW  240
70       V                                                                241
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Seq ID NO: C337 Protein Sequence
Protein Accession #: BAC03767.1

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75       1          11         21         31         41         51
         |          |          |          |          |          |
         MGCDGRVSGL LRRNLQPTLT YWSVFFSFGL CIAFLGPTLL DLRCQTHSSL PQISWVFFSQ   60
         QLCLLLGSAL GGVFKRTLAQ SLWALFTSSL AISLVFAVIP FCRDVKVLAS VMALAGLAMG  120
         CIDTVANMQL VRMYQKDSAV PLQVLHFFVG FGALLSPLIA DPFLSEANCL PANSTANTTS  180
80       RGHLFHVSRV LGQHHVDAKP WSNQTFPGLT PKDGAGTRVS YAFWIMALID LPVPMAVLML  240
         LSKERLLTCC PQRRPLLLLS DELALETQPP EKEDASSLPP KFQSHLGHED LFSCCQRKNL  300
         RGAPYSFFAI HITGALVLFM TDGLTGAYSA FVYSYAVEKP LSVGHKVAGY LPSLFWGPIT  360
         LGRLLSIPIS SRMKPATMVF INVVGVVVTF LVLLIFSYNV VFLFVGTASL GLFLSSTFPS  420
         MLAYTEDSLQ YKGCATTVLV TGAGVGEMVL QMLVGSIFQA QGSYSFLVCG VIFGCLAFTF  480
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YILLLFFHRM HPGLPSVPTQ DRSIGMENSE CYQR                      514
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Seq ID NO: C338 Protein Sequence
Protein Accession #: NP_002194.1

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1          11         21         31         41         51
|          |          |          |          |          |
MGPERTGAAP LPLLLVLALS QGILNCCLAY NVGLPEAKIF SGPSSEQFGY AVQQFINPKG    60
NWLLVGSPWS GPPENRMGDV YKCPVDLSTA TCEKLNLQTS TSIPNVTEMK TNMSLGLILT   120
RNMGTGGFLT CGPLWAQQCG NQYYTTGVCS DISPDFQLSA SFSPATQPCP SLIDVVVVCD   180
ESNSIYPWDA VKNFLEKFVQ GLDIGPTKTQ VGLIQYANNP RVVFNLNTYK TKEEMIVATS   240
QTSQYGGDLT NTFGAIQYAR KYAYSAASGG RRSATKVMVV VTDGESHDGS MLKAVIDQCN   300
HDNILRFGIA VLGYLNRNAL DTKNLIKEIK AIASIPTERY FFNVSDEAAL LEKAGTLGEQ   360
IPSIEGTVQG GDNFQMEMSQ VGFSADYSSQ NDILMLGAVG AFGWSGTIVQ KTSHGHLIPP   420
KQAFDQILQD RNHSSYLGYS VAAISTGEST HFVAGAPRAN YTGQIVLYSV NENGNITVIQ   480
AHRGDQIGSY FGSVLCSVDV DKDTITDVLL VGAPMYMSDL KKEEGRVYLF TIKKGILGQH   540
QFLEGPEGIE NTRFGSAIAA LSDINMDGFN DVIVGSPLEN QNSGAVYIYN GHQGTIRTKY   600
SQKILGSDGA FRSHLQYFGR SLDGYGDLNG DSITDVSIGA FGQVVQLWSQ SIADVAIEAS   660
FTPEKITLVN KNAQIILKLC FSAKFRPTKQ NNQVAIVYNI TLDADGFSSR VTSRGLFKEN   720
NERCLQKNMV VNQAQSCPEH IIYIQEPSDV VNSLDLRVDI SLENPGTSPA LEAYSETAKV   780
FSIPFHKDCG EDGLCISDLV LDVRQIPAAQ EQPFIVSNQN KRLTFSVTLK NKRESAYNTG   840
IVVDFSENLF FASFSLPVDG TEVTCQVAAS QKSVACDVGY PALKREQQVT FTINFDFNLQ   900
NLQNQASLSF QALSESQEEN KADNLVNLKI PLLYDAEIHL TRSTNINFYE ISSDGNVPSI   960
VHSFEDVGPK FIFSLKVTTG SVPVSMATVI IHIPQYTKEK NPLMYLTGVQ TDKAGDISCN  1020
ADINPLKIGQ TSSSVSFKSE NFRHTKELNC RTASCSNVTC WLKDVHMKGE YFVNVTTRIW  1080
NGTFASSTFQ TVQLTAAAEI NTYNPEIYVI EDNTVTIPLM IMKPDEKAEV PTGVIIGSII  1140
AGILLLLALV AILWKLGFFK RKYEKMTKNP DEIDETTELS S                      1181
```

Seq ID NO: C339 Protein Sequence
Protein Accession #: NP_113648.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MYRPRARAAP EGRVRGCAVP STVLLLLAYL AYLALGTGVP WTLEGRAAQD SSRSFQRDKW    60
ELLQNFTCLD RPALDSLIRD VVQAYKNGAS LLSNTTSMGR WELVGSFFFS VSTITTIGYG   120
NLSPNTMAAR LFCIFFALVG IPLNLVVLNR LGHLMQQGVN HWASRLGGTW QDDPDKARWLA  180
GSGALLSGLL LFLLLPPLLF .SHMEGWSYTE GFYFAPITLS TVGFGDYVIG MNPSQRYPLW  240
YKNMVSLWIL FGMAWLALII KLILSQLETP GRVCSCCHHS SKEDFKSQSW RQGPDREPES   300
HSPQQGCYPE GPMGIIQHLE PSAHAAGCGK DS                                 332
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Seq ID NO: C340 Protein Sequence
Protein Accession #: NP_004145.1

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1          11         21         31         41         51
|          |          |          |          |          |
MEWDNGTGQA LGLPPTTCVY RENFKQLLLP PVYSAVLAAG LPLNICVITQ ICTSRRALTR    60
TAVYTLNLAL ADLLYACSLP LLIYNYAQGD HWPPGDFACR LVRFLFYANL HGSILFLTCI   120
SFQRYLGICH PLAPWHKRGG RRAAWLVCVA VWLAVTTQCL PTAIFAATGI QRNRTVCYDL   180
SPPALATHYM PYGMALTVIG FLLPFAALLA CYCLLACRLC RQDGPAEPVA QERRGKAARM   240
AVVVAAAFAI SFLPFHITKT AYLAVRSTPG VPCTVLEAFA AAYKGTRPFA SANSVLDPIL   300
FYFTQKKFRR RPHELLQKLT AKWQRQGR                                      328
```

Seq ID NO: C341 Protein Sequence
Protein Accession #: NP_009128.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MQRPGPRLWL VLQVMGSCAA ISSMDMERPG DGKCQPIEIP MCKDIGYNMT RMPNLMGHEN    60
QREAAIQLHE FAPLVEYGCH GHLRFFLCSL YAPMCTEQVS TPIPACRVMC EQARLKCSPI   120
MEQFNFKWPD SLDCRKLPNK NDPNYLCMEA PNNGSDEPTR GSGLFPPLFR PQRPHSAQEH   180
PLKDGGRPGRVG GCDNPGKFHH VEKSASCAPL CTPGVDVYWS REDKRPAVVW LAIWAVLCFF  240
SSAFTVLTFL IDPARFRYPE RPIIFLSMCY CVYSVGYLIR LFAGAESIAC DRDSGQLYVI   300
QEGLESTGCT LVFLVLYYFG MASSLWWVVL TLTWFLAAGK KWGHEAIEAN SSYFHLAAWA   360
IPAVKTILIL VMRRVAGDEL TGVCYVGSMD VNALTGFVLI PLACYLVGT SFILSGFVAL    420
FHIRRVMKTG GENTDKLEKL MVRIGLFSVL YTVPATCVIA CYFYERLNMD YWKILAAQHK   480
CKMNNQTKTL DCLMAASIPA VEIFMVKIFM LLVVGITSGM WIWTSKTLQS WQQVCSRRLK   540
KKSRRKPASV ITSGGIYKKA QHPQKTHHGK YEIPAQSPTC V                       581
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Seq ID NO: C342 Protein Sequence
Protein Accession #: NP_005752.1

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1          11         21         31         41         51
|          |          |          |          |          |
MEVSRRKAPP RPPRPAAPLP LLAYLLALAA PGRGADEPVW RSEQAIGAIA ASQEDGVFVA    60
SGSCLDQLDY SLEHSLSRLY RDQAGNCTEP VSLAPPARPR PGSSFSKLLL PYREGAAGLG   120
GLLLTGWTFD RGACEVRPLG NLSRNSLRNG TEVVSCHPQG STAGVVYRAG RNNRWYLAVA   180
ATYVLPEPET ASRCNPAASD HDTAIALKDT EGRSLATQEL GRLKLCEGAG SLHFVDAFLW   240
NGSIYFPYYP YNYTSGAATG WPSMARIAQS TEVLFQGQAS LDCGHGHPDG RRLLLSSSLV   300
EALDVWAGVF SAAAGEGQER RSPTTTALCL FRMSEIQARA KRVSWDFKTA ESHCKEGDQP   360
ERVQPIASST LIHSDLTSVY GTVVMNRTVL FLGTGDGQLL KVILGENLTS NCPEVIYEIK   420
EETPVFYKLV PDPVKNIYIY LTAGKEVRRI RVANCNKHKS CSECLTATDP HCGWCHSLQR   480
CTFQGDCVHS ENLENWLDIS SGAKKCPKIQ IIRSSKEKTT VTMVGSFSPR HSKCMVKNVD   540
SSRELCQNKS QPNRTCTCSI PTRATYKDVS VVNVMFSFGS WNLSDRFNFT NCSSLKECPA   600
CVETGCAWCK SARRCIHPFT ACDPSDYERN QEQCPVAVEK TSGGGRPKEN KGNRTNQALQ   660
VFYIKSIEPQ KVSTLGKSNV IVTGANFTRA SNITMILKGT STCDKDVIQV SHVLNDTHMK   720
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        FSLPSSRKEM KDVCIQFDGG NCSSVGSLSY IALPHCSLIF PATTWISGGQ NITMMGRNFD   780
        VIDNLIISHE LKGNINVSEY CVATYCGFLA PSLKSSKVRT NVTVKLRVQD TYLDCGTLQY   840
        REDPRFTGYR VESEVDTELE VKIQKENDNF NISKKDIEIT LFHGENGQLN CSFENITRNQ   900
        DLTTILCKIK GIKTASTIAN SSKKVRVKLG NLELYVEQES VPSTWYPLIV LPVLLVIVIF   960
5       AAVGVTRHKS KELSRKQSQQ LELLESELRK EIRDGFAELQ MDKLDVVDSF GTVPFLDYKH  1020
        FALRTFFPES GGFTHIFTED MHNRDANDKN ESLTALDALI CNKSFLVTVI HTLEKQKNFS  1080
        VKDRCLFASF LTIALQTKLV YLTSILEVLT RDLMEQCSNM QPKLMLRRTE SVVEKLLTNW  1140
        MSVCLSGFLR ETVGEPFYLL VTTLNQKINK GPVDVITCKA LYTLNEDWLL WQVPEFSTVA  1200
10      LNVVPEKIPE NESADVCRNI SVNVLDCDTI GQAKEKIFQA FLSKNGSPYG LQLNEIGLEL  1260
        QMGTRQKELL DIDSSSVILE DGITKLNTIG HYBISNGSTI KVPFKKIANFT SDVEYSDDHC 1320
        HLILPDSEAP QDVQGKRHRG KHKFKVKEMY LTKLLSTKVA IHSVLEKLFR SIWSLPNSRA  1380
        PFAIKYFPDF LDAQAENKKI TDPDVVHIWK TNSLPLRFWV NILKNPQFVF DIKKTPHIDG  1440
        CLSVIAQAFM DAFSLTEQQL GKEAPTNKLL YAKDIPTYKE EVKSYYKAIR DLPPLSSSEM  1500
15      EEFLTQESKK HENEFNEEVA LTEIYKYIVK YFDEILNKLE RERGLEEAQK QLLHVKVLFD  1560
        EKKKCKWM                                                          1568

        Seq ID NO: C343 Protein Sequence
        Protein Accession #: NP_002176.1

20      1          11         21         31         41         51
        |          |          |          |          |          |
        MTILGTTFGM VFSLLQVVSG ESGYAQNGDL EDAELDDYSF SCYSQLEVNG SQHSLTCAPE   60
        DPDVNTTNLE FEICGALVEV KCLNFRKLQB IYFIETKKFL LIGKSNICVK VGEKSLTCKK  120
        IDLTTIVKPE APFDLSVIYR EGANDFVVTF NTSHLQKKYV KVLMHDVAYR QEKDENKWTH  180
25      VNLSSTKLTL LQRKLQPAAM YEIKVRSIPD HYFKGFWSEW SPSYYFRTPE INNSSGEMDP  240
        ILLTISILSF PSVALLVILA CVLWKKRIKP IVWPSLPDHK KTLEHLCKKP RKNLNVSFNP  300
        ESPLDCQIHR VDDIQARDEV EGFLQDTFPQ QLEESEKQRL GGDVQSPNCP SEDVVVTPES  360
        FGRDSSLTCL AGNVSACDAP ILSSSRSLDC RESGKNGPHV YQDLLLSLGT TNSTLPPPFS  420
        LQSGILTLNP VAQGQPILTS LGSNQEEAYV TMSSFYQNQ                         459

30      Seq ID NO: C344 Protein Sequence
        Protein Accession #: NP_002713.1

35      1          11         21         31         41         51
        |          |          |          |          |          |
        MAAARLCLSL LLLSTCVALL LQPLLGAQGA PLEPVYPGDN ATPEQMAQYA ADLRRYINML   60
        TRPRYGKRHK EDTLAPSEWG SPHAAVPREL SPLDL                             95

        Seq ID NO: C345 Protein Sequence
40      Protein Accession #: NP_115934.1

        1          11         21         31         41         51
        |          |          |          |          |          |
45      MTWRHHVRLL PTVSLALQII NLGNSYQREK HNGGREEVTK VATQKHRQSP LNWTSSHFGE   60
        VTGSAEGWGP EEPLPYSRAF GEGASARPRC CRNGGTCVLG SPCVCPAHFT GRYCEHDQRR  120
        SECGALEHGA WTLRACHLCR CIFGALHCLP LQTPDRCDPK DFLASHAHGP SAGGAPSLLL  180
        LLPCALLHRL LRPDAPAHPR SLVPSVLQRE RRPCGRPGLG HRL                    223

        Seq ID NO: C346 Protein Sequence
50      Protein Accession #: NP_006524.1

        1          11         21         31         41         51
        |          |          |          |          |          |
        MARSLVCLGV IILLSAFSGP GVRGGPMPKL ADRKLCADQE CSHPISMAVA LQDYMAPDCR   60
55      FLTIHRGQVV YVFSKLKGRG RLFWGGSVQG DYYGDLAARL GYFPSSIVRE DQTLKPGKVD  120
        VKTDKWDFYC Q                                                      131

        Seq ID NO: C347 Protein Sequence
60      Protein Accession #: Eos sequence

        1          11         21         31         41         51
        |          |          |          |          |          |
        MTQVTEKSTE HPEKTTSTTE KTTRTPEKPT LYSEKTICTK GKNTPVPEKP TENLGNTTLT   60
65      TETIKAPVKS TENPEKTAAV TKTIKPSVKV TGDKSLTTTS SHLNKTEVTH QVPTGSFTLI  120
        TSRTKLSSIT SEATGNESHP YLNKDGSQKG IHAGQMGEND SPPAWAIVIV VLVAVILLLV  180
        FLGLIFLVSY MMRTRRTLTQ NTQYNDAEDE GGPNSYPVYL MEQQNLGMGQ IPSPR        235

70      Seq ID NO: C348 Protein Sequence
        Protein Accession #: NP_543146.1

        1          11         21         31         41         51.
        |          |          |          |          |          |
75      MTQVTEKSTE HPEKTTSTTE KTTRTPEKPT LYSEKTICTK GKNTPVPEKP TENLGNTTLT   60
        TETIKAPVKS TENPEKTAAV TKTIKPSVKV TGDKSLTTTS SHLNKTEVTH QVPTGSFTLI  120
        TSRTKLSSIT SEATGNESHP YLNKDGSQKG IHAGQMGEND SPPAWAIVIV VLVAVILLLV  180
        FLGLIFLVSY MMRTRRTLTQ NTQYNDAEDE GGPNSYPVYL MEQQNLGMGQ IPSPR        235

80      Seq ID NO: C349 Protein Sequence
        Protein Accession #: FGENESH predicted

        1          11         21         31         41         51
        |          |          |          |          |          |
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        MWPRLAFCCW GLALVSGWAT FQQMSPSRNF SFRLFPETAP GAPGSIPAPP APGDEAAGSR     60
        VERLGQAFRR RVRLLRELSE RLELVPLVDD SSSVGEVNFR SELMFVRKLL SDFPVVPTAT    120
        RVAIVTFSSK NYVVPRVDYI STRRARQHKC ALLLQEIPAI SYRGGGTYTK GAFQQAAQIL    180
        LHARENSTKV VFLITDGYSN GGDPRPIAAS LRDSGVEIFT FGIWQGNIRE LNDMASTPKE    240
    5   EHCYLLHSFE EFEALARRAL HEDLPSGSFI QDDMVHCSYL CDEGKDCCDR MGSCKCGTHT    300
        GHFECICEKG YYGKGLQYEC TACPSGTYKP EGSPGGISSC IPCPDENHTS PPGSTSPEDC    360
        VCREGYRASG QTCELVHCPA LKPPENGYFI QNTCNNHFNA ACGVRCHPGF DLVGSSIILC    420
        LPNGLWSGSE SYCRVRTCPH LRQPKHGHIS CSTREMLYKT TCLVACDEGY RLEGSDKLTC    480
        QGNSQWDGPE PRCVERHCST FQMPKDVIIS PHNCGKQPAK FGTICYVSCR QGFILSGVKE    540
    10  MLRCTTSGKW NVGVQAAVCK DVEAPQINCP KDIEAKTLEQ QDSANVTWQI PTAKDNSGEK    600
        VSVHVHPAFT PPYLFPIGDV AIVYTATDLS GNQASCIFHI KVIDAEPPVI DWCRSPPPVQ    660
        VSEKVHAASW DEPQFSDNSG AELVITRSHT QGDLFPQGET IVQYTATDPS GNNRTCDIHI    720
        VIKGSPCEIP FTPVNGDFIC TPDNTGVNCT LTCLEGYDFT EGSTDKYYCA YEDGVWKPTY    780
        TTEWPDCAKK RPANHGFKSF EMFYKAARCD DTDLMKKFSE AFETTLGKMV PSFCSDAEDI    840
    15  DCRLEENLTK KYCLEYNYDY ENGFAIGPGG WGAANRLDYS YDDFLDTVQE TATSIGNAKS    900
        SRIKRSAPLS DYKIKLIFNI TASVPLPDER NDTLEWENQQ RLLQTLETIT NKLKRTLNKD    960
        PMYSFQLASE ILIADSNSLE TKKASPFCRP GSVLRGRMCV NCPLGTYYNL EHFTCESCRI   1020
        GSYQDBEGQL ECKLCPSGMY TEYIHSRNIS DCKAQCKQGT YSYSGLETCE SCPLGTYQPK   1080
        FGSRSCLSCP ENTSTVKRGA VNISACGVPC PEGKFSRSGL MPCHPCPRDY YQPNAGKAFC   1140
    20  LACPFYGTTP FAGSRSITEC STSVLNITIF GGFGHLELLN CPSEVFHECF FNPCHNSGTC   1200
        QQLGRGYVCL CPLGYTGLKC ETDIDECSPL PCLNNGVCKD LVGEFICECP SGYTGQRCEE   1260
        NINECSSSPC LNKGICVDGV AGYRCTCVKG FVGLHCETEV NECQSNPCLN NAVCEDQVGG   1320
        FLCKCPRGFL GTRCGKNVDE CLSQPCKNGA TCKDGANSFR CLCAAGFTGS HCELNINECQ   1380
        SNPCRNQATC VDELNSYSCK CQPGFSGKRC ETEQSTGFNL DFEVSGIYGY VMLDGMLPSL   1440
    25  HALTCTFWMK SSDDMNYGTP ISYAVDNGSD NTLLLTDYNG WVLYVNGREK ITNCPSVNDG   1500
        RWHHIAITWT SANGIWKVYI DGKLSDGGAG LSVGLPIPGG GALVLGQEQD KKGEGFSPAE   1560
        SFVGSISQLN LWDYVLSPQQ VKSLATSCPE ELSKGNVLAW PDFLSGIVGK VKIDSKSIFC   1620
        SDCPRLGGSV PHLRTASEDL KPGSKVNLFC DPGFQLVGNP VQYCLNGQQW TQPLPHCERI   1680
        SCGVPPPLEN GFHSADDFYA GSTVTYQCNN GYYLLGDSRM FCTDNGSWNG VSPSCLDVDE   1740
    30  CAVGSDCSEH ASCLNVDGSY ICSCVPPYTG DGKNCAEPIK CKAPGNPENG HSSGEIYTVG   1800
        AGVTPSCQEG YQLMGVTKIT CLESGEWNHL IPYCKAVSCG KPAIPENGCI EELAFTFGSK   1860
        VTYRCNKGYT LAGDKESSCL ANSSWSHSPP VCEPVKCSSP ENINNGKYIL SGLTYLSTAS   1920
        YSCDTGYSLQ GPSIIECTAS GIWDRAPPAC HLVFCGEPPA IKDAVITGNN FTFRNTVTYT   1980
        CKEGYTLAGL DTIECLADGK WSRSDQQCLA VSCDEPPIVD HASPETAHRL FGDIAFYYCS   2040
    35  DGYSLADNSQ LLCNAQGKWV PPEGQDMPRC IAHPCEKPPS VSYSILESVS KAKFPAAGSVV  2100
        SFKCMEGFVL NTSAKIECMR GGQWNPSPMS IQCIPVRCGE PPSIMNGYAS GSNYSFGAMV   2160
        AYSCNKGFYI KGEKKSTCEA TGQWSSPIPT CHPVSCGEPP KVENGFLEHT TGRIPESEVR   2220
        YQCNPGYKSV GSPVFVCQAN RHWHSESPLM CVPLDCGKPP PIQNGFMKGE NFEVGSKVQF   2280
    40  PCNEGYELVG DSSWTCQKSG KWNKKSNPKC MPAKCPEPPL LENQLVLKEL TTEVGVVTFS   2340
        CKEGHVLQGP SVLKCLPSQQ WNDSFPVCKI VLCTPPPLIS FGVPIPSSAL HFGSTVKYSC   2400
        VGGFFLRGNS TTLCQPDGTW SSPLPECVPV ECPQPEEIPN GIIDVQGLAY LSTALYTCKP   2460
        GFELVGNTTT LCGENGHWLG GKPTCKAIEC LKPKEILNGK FSYTDLHYGQ TVTYSCNRGP   2520
        RLEGPSALTC LETGDWDVDA PSCNAIHCDS PQPIENGFVE GADYSYGAII IYSCFPGFQV   2580
    45  AGHAMQTCEE SGWSSSIPTC MPIDCGLPPH IDFGDCTKLK DDQGYFEQED DMMEVPVVTP   2640
        HPPYHLGAVA KTWENTKESP ATHSSNFLYG TMVSYTCNPG YELLGNPVLI CQEDGTWNGS   2700
        APSCISIECD LPTAPENGPL RPTETSMGSA VQYSCKPGHI LAGSDLRLCL ENRKWSGASP   2760
        RCEAISCKKP NPVMNGSIKG SNYTYLSTLY YECDPGYVLN GTRRRTCQDD KNWDEDEPIC   2820
        IPVDCSSPPV SANGQVRGDE YTFQKEIEYT CNEGFLLEGA RSRVCLANGS WSGATPDCVP   2880
    50  VRCATPPQLA NGVTEGLDYG FMKEVTFHCH EGYILHGAPK LTCQSDGNWD AEIPLCKPVN   2940
        CGPPEDLAHG FPNGFSPIHG GHIQYQCFPG YKLHGNSSRR CLSNGSWSGS SPSCLPCRCS   3000
        TPVIEYGTVN GTDFDCGKAA RIQCFKGFKL LGLSEITCEA DGQWSSGFPH CEHTSCGSLP   3060
        MIPNAFISET SSWKENVITY SCRSGYVIQG SSDLICTEKG VWSQPYPVCE PLSCGSPPSV   3120
    55  ANAVATGEAH TYESEVKLRC LEGYTMDTDT DTFTCQKDGR WFPERISCSP KKCPLPENIT   3180
        HILVHGDDFS VNRQVSVSCA EGYTFEGVNI SVCQLDGTWE PPFSDESCSP VSCGKPESPE   3240
        HGFVVGSKYT FESTIIYQCE PGYELEGNRE RVCQENRQWS GGVAICKETR CBTPLEFLNG   3300
        KADIENRTTG PNVVYSCNRG YSLEGPSEAH CTENGTWSHP VPLCKPNPCP VPFVIPENAL   3360
    60  LSEKEFYVDQ NVSIKCREGF LLQGHGIITC NPDETWTQTS AKCEKISCGP PAHVENAIAR   3420
        GVHYQYGDMI TYSCYSGYML EGFLRSVCLE NGTWTSPPIC RAVCRFPCQN GGICQRFNAC   3480
        SCPEGWMGRL CEEPICILPC LNGGRCVAPY QCDCPPGWTG SRCHTAVCQS PCLNGGKCVR   3540
        PNRCHCLSSW TGHNCSR                                                  3557
```

Seq ID NO: C350 Protein Sequence
Protein Accession #: FGENESH predicted

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        1          11         21         31         41         51
        |          |          |          |          |          |
        MRFSVSGMRT DYPRSVLAPA YVSVCLLLLC PREVIAPAGS EPWLCQPAPR CGDKIYNPLE     60
        QCCYNDAIVS LSETRQCGPP CTFWPCPFELC CLDSFGLTND FVVKLKVQGV NSQCHSSPIS    120
        SKCERGRIC                                                            129
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Seq ID NO: C351 Protein Sequence
Protein Accession #: AAH35671.1

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        1          11         21         31         41         51
        |          |          |          |          |          |
        MVPGARGGGA LARAAGRGLL ALLLAVSAPL RLQAEELGDG CGHLVTYQDS GTMTSKNYPG     60
        TYPNHTVCEK TITVPKGKRL ILRLGDLDIE SQTCASDYLL FTSSSDQYGP YCGSMTVPKE    120
        LLLNTSEVTV RFESGSHISG RGFLLTYASS DHPDLITCLE RASHYLKTEY SKFCPAGCRD    180
        VAGDISGNMV DGYRDTSLLC KAAIHAGIIA DELGGQISVL QRKGISRYEG ILANGVLSRD    240
        GSLSDKRFLP TSNGCSRSLS PEPDGQIRAS SSWQSVNESG DQVHWSPGQA RLQDQGPSWA    300
        SGDSSNNHKP REWLEIDLGE KKKITGIRTT GSTQSNFNFY VKSFVMNFKN NNSKWKTYKG    360
        IVNNEEKVFQ GNSNFRDPVQ NNFIPPIVAR YVRVVPQTWH QRIALKVELI GCQITQGNDS    420
        LVWRRTSQST SVSTKKEDET ITRPIPSEET STGINITTVA IPLVLLVVLV FAGMGIFAAF    480
        RKKKKKGSPY GSAEAQKTDC WKQIKYPFAR HQSAEFTISY DNEKEMTQKL DLITSDMAG     539
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Seq ID NO: C352 Protein Sequence
Protein Accession #: Eos sequence

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1          11         21         31         41         51
|          |          |          |          |          |
MGFGAGQRLR PVPAPRSSAE EAARPGQLRL GIRRGEABLA KLAPSGVMVP GARGGGALAR   60
AAGRGLLALL LAVSAPLRLQ AEELGDGCGH LVTYQDSGTM TSKNYPGTYP NHTVCEKTIT  120
VPKGKRLILR LGDLDIESQT CASDYLLFTS SSDQYGPYCG SMTVPKELLL NTSEVTVRPE  180
SGSHISGRGF LLTYASSDHP DLITCLERAS HYLKTEYSKF CPAGCRDVAG DISGNMVDGY  240
RDTSLLCKAA IHAGIIADEL GGQISVLQRK GISRYEGILA NGVLSRDGSL SDKRFLFTSN  300
GCSRSLSFEP DGQIRASSSW QSVNESGDQV HWSPGQARLQ DQGPSWASGD SSNNHKPREW  360
LEIDLGEKKK ITGIRTTGST QSNFNFYVKS FVMNFKNNNS KWKTYKGIVN NEEKVFQGNS  420
NFRDPVQNNF IPPIVARYVR VVPQTWHQRI ALKVELIGCQ ITQGNDSLVW RKTSQSTSVS  480
TKKEDETITR PIPSEETSTG INITTVAIPL VLLVVLVFAG MGIFAAPRKK KKKGSPYGSA  540
EAQKTDCWKQ IKYPFARHQS AEPTISYDNE KEMTQKLDLI TSDMAG              586
```

Seq ID NO: C353 Protein Sequence
Protein Accession #: FGENESH predicted

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1          11         21         31         41         51
|          |          |          |          |          |
MFQRQERFLD LSSAEAVAAW ILHQHPDIIN KGDGCGHLVT YQDSGTMTSK NYPGTYPNHT   60
VCEKTITVPK GKRLILRLGD LDIESQTCAS DYLLFTSSSD QYGMQKEEET EVLCLSVAGA  120
QRVDIPVQLL PSFLEGWKGH ADARGPYCGS MTVPKELLLN TSEVTVRFES GSHISGRGFL  180
LTYASSDHPD LITCLERASH YLKTEYSKFC PAGCRDVAGD ISGNMVDGYR DTSLLCKAAI  240
HAGIIADELG GQISVLQRKG ISRYEGILAN GVLSRDGSLS DKRFLPTSNG CSRSLSFEPD  300
GQIRASSSWQ SVNESGDQVH WSPGQARLQD QGPSWASGDS SNNHKPREWL EIDLGEKKKI  360
TGIRTTGSTQ SNFNFYVKSF VMNPKNNNSK WKTYKGIVNN EEKVFQGNSN FRDPVQNNFI  420
PPIVARYVRV VPQTWHQRIA LKVELIGCQI TQGNDSLVWR KTSQSTSVST KKEDETITRP  480
IPSEETSTDA MPVQIVGDHT QMISQRENLG PDEGKIPFKG TAESMVRVVP AVVVNDLGML  540
PLAHTPEEDI DHYCWKQIKY PFARHQSABF TISYDNEKEM TQKLDLITSD MADYQQPLMI  600
GTGTVTRKGS TFRPMDTDAE EAGVSTDAGG HYDCPQRAGR HEYALPLAPP EPEYATPIVE  660
RHVLRAHTFS AQSGYRVPGP QPGHKHSLSS GGFSPVAGVG AQDGDYQRPH SAQPADRGYD  720
RPKAVSALAT ESGHPDSQKP PTHPGTSDSY SAPRDCLTPL NQTAMTALL           769
```

Seq ID NO: C354 Protein Sequence
Protein Accession #: NP_004607.1

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1          11         21         31         41         51
|          |          |          |          |          |
MAGVSACIKY SMFTFNFLFW LCGILILALA IWVRVSNDSQ AIFGSEDVGS SSYVAVDILI   60
AVGAIIMILG FLGCCGAIKE SRCMLLLFFI GLLLILLLQV ATGILGAVPK SKSDRIVNET  120
LYENTKLLSA TGESEKQFQE AIIVFQEEFK CCGLVNGAAD WGNNFQHYPE LCACLDKQRP  180
CQSYNGKQVY KETCISFIKD FLAKNLIIVI GISFGLAVIE ILGLVFSMVL YCQIGNK     237
```

Seq ID NO: C355 Protein Sequence
Protein Accession #: NP_004608.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MCTGGCARCL GGTLIPLAPF GFLANILLFF PGGKVIDDND HLSQBIWFFG GILGSGVLMI   60
FPALVFLGLK NNDCCGCCGN EGCGKRPAMF TSTIFAVVGF LGAGYSPIIS AISINKGPKC  120
LMANSTWGYP FHDGDYLNDE ALWNKCREPL NVVPWNLTLF SILLLVVGGIQ MVLCAIQVVN  180
GLLGTLCGDC QCCGCCGGDG PV                                        202
```

Seq ID NO: C356 Protein Sequence
Protein Accession #: NP_002372.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MPRPAPARRL PGLLLLLWPL LLLPSAAPDP VARPGFRRLE TRGPGGSPGR RPSPAAPDGA   60
PASGTSEPGR ARGAGVCKSR PLDLVFIIDS SRSVRPLEFT KVKTFVSRII DTLDIGPADT  120
RVAVVNYAST VKIEFQLQAY TDKQSLKQAV GRITPLSTGT MSGLAIQTAM DEAFTVEAGA  180
REPSSNIPKV AIIVTDGRPQ DQVNEVAARA QASGIELYAV GVDRADMASL KMMASEPLEE  240
HVFYVETYGV IEKLSSRFQE TPCALDPCVL GTHQCQHVCI SDGEGKHHCE CSQGYTLNAD  300
KKTCSALDRC ALNTHGCEHI CVNDRSGSYH CECYEGYTLN EDRKTCSAQD KCALGTHGCQ  360
HICVNDRTGS HHCECYEGYT LNADKKTCSV RDKCALGSHG CQHICVSDGA ASYHCDCYPG  420
YTLNEDKKTC SATEEARRLV STEDACGCEA TLAFQDKVSS YLQRLNTKLD DILEKLKINE  480
YGQIHR                                                         486
```

Seq ID NO: C357 Protein Sequence
Protein Accession #: NP_057723.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MARGSLRRLL RLLVLGLWLA LLRSVAGEQA PGTAPCSRGS SWSADLDKCM DCASCRARPH   60
SDFCLGCAAA PPAPPRLLWP ILGGALSLTF VLGLLSGFLV WRRCRRREKF TTPIEETGGE  120
GCPAVALIQ                                                      129
```

Seq ID NO: C358 Protein Sequence
Protein Accession #: NP_001810.1

1365

```
       1          11         21         31         41         51
       |          |          |          |          |          |
       MQPTLLLSLL GAVGLAAVNS MPVDNRNHNE GMVTRCIIEV LSNALSKSSA PPITPECRQV  60
       LKTSRKDVKD KETTENENTK FEVRLLRDPA DASEAHESSS RGEAGAPGEE DIQGPTKADT  120
5      EKWAEGGGHS RERADEPQWS LYPSDSQVSE EVRTRHSEKS QREDEEEEEG ENYQKGERGE  180
       DSSEEKHLEE PGETQNAFLN ERKQASAIKK EELVARSETH AAGHSQEKTH SREKSSQESG  240
       EEAGSQENHP QESKGQPRSQ EESEEGEEDA TSEVDKRRTR PRHHHGRSRP DRSSQGGSLP  300
       SEEKGHPQEE SEESNVSMAS LGEKRDHHST HYRASEEEPE YGEEIKGYPG VQAPEDLEWE  360
       RYRGRGSEEY RAPRPQSEES WDEEDKRNYP SLELDKMAHG YGEESEEERG LEPGKGRHHR  420
10     GRGGEPRAYF MSDTREEKRP LGEGHHRVQE NQMDKARRHP QGAWKELDRN YLNYGEEGAP  480
       GKWQQQGDLQ DTKENREEAR FQDKQYSSHH TAEKRKRLGE LFNPYYDPLQ WKSSHFERRD  540
       NMVDNPLEGE EENELTLNEK NFFPEYNYDW WEKKPFSEDV NWGYEKRNLA RVPKLDLKRQ  600
       YDRVAQLDQL LHYRKKSAEF PDFYDSEEPV STHQEAENEK DRADQTVLTE DEKKELENLA  660
15     AMDLELQKIA EKFSQRG                                               677

       Seq ID NO: C359 Protein Sequence
       Protein Accession #: XP_093082.1


       1          11         21         31         41         51
20     |          |          |          |          |          |
       MKLLCEGLKQ PNCVLQTLRW YRCLISSASC GALAAVLSTS QWLTELEFSE TKLEASALKL  60
       LYGGLKDPNC KLQKLNLQFS LSVTAAKLPV GMVGNCSGFS GSLVQSHFGY CQDSSFKCDL  120
       CKLLWPSTRV AAAKDCGSPK SFLSEGLNWA GRLEAVEEVL GLGVLVQPGD PASQGGGHCE  180
       NYGSFRDLVD LEVKAEPSLR KGGMDLQRPT LQVVLLCKIF SLKLFLFIAL PNSPGQVSVV  240
25     QVTIPDGFVN VTVGSNVTLI CIYTTTVASR EQLSIQWSFF HKKEMEPISS PWEEGKWPDV  300
       EAVKGTLDGQ QAELQIYFSQ GGQAVAIGQF KDRITGSNDP GNASITISHM QPADSGIYIC  360
       DVNNPPDFLG QNQGILNVSV LVKPSKPLCS VQGRPETGHT ISLSCLSALG TPSPVYYWHK  420
       LEGRDIVPVK ENFNPTTGIL VIGNLTNFEQ GYYQCTAINR LGNSSCEIDL TSSHPEVGII  480
       VGALIGSLVG AAIIISVVCF ARNKAKAKAK ERNSKTIAEL EPMTKINPRG ESEAMPREDA  540
30     TQLEVTLPSS IHETGPDTIQ EPDYEPKPTQ EPAPEPAPGS EPMAVPDLDI ELELEPETQS  600
       ELEPEPEPEP ESEPGVVVEP LSEDEKGVVK A                                631


       Seq ID NO: C360 Protein Sequence
       Protein Accession #: FGENESH predicted
35

       1          11         21         31         41         51
       |          |          |          |          |          |
       MVPAFWKVFL ILSCLAGQVS VVQVTIPDGF VNVTVGSNVT LICIYTTTVA SREQLSIQWS  60
40     PFHKKEMEPI SSPWEEGKWP DVEAVKGTLD GQQAELQIYF SQGGQAVAIG QFKDRITGSN  120
       DPGNASITIS HMQPADSGIY ICDVNNPPDF LGQNQGILNV SVLVKPSKPL CSVQGRPETG  180
       HTISLSCLSA LGTPSPVYYW HKLEGRDIVP VKENFNPTTG ILVIGNLTNF EQGYYQCTAI  240
       NRLGNSSCEI DLTSSHPEVG IIVGALIGSL VGAAIIISVV CPARNKAKAK AKERNSKTIA  300
       ELEPMTKINP RGESEAMPRE DATQLEVTLP SSIHETGPDT IQEPDYEPKP TQEPAPEPAP  360
45     GSEPMAVPDL DIELELEPET QSELEPEPEP EPESEPGVVV EPLSEDEKGV VKA          413

       Seq ID NO: C361 Protein Sequence
       Protein Accession #: NP_003011.1


50     1          11         21         31         41         51
       |          |          |          |          |          |
       MVSRMVSTML SGLLFWLASG WTPAFAYSPR TPDRVSEADI QRLLHGVMEQ LGIARPRVEY  60
       PAHQAMNLVG PQSIEGGAHE GLQHLGPFGN IPNIVAELTG DNIPKDPSED QGYPDPPNPC  120
       PVGKTDDGCL ENTPDTAEFS REFQLHQHLF DPEHDYPGLG KWNKKLLYEK MKGGERRKRR  180
55     SVNPYLQGQR LDNVVAKKSV PHFSDEDKDP E                                211

       Seq ID NO: C362 Protein Sequence
       Protein Accession #: NP_076926.2


60     1          11         21         31         41         51
       |          |          |          |          |          |
       MTTMQGMEQA MPGAGPGVPQ LGNMAVIHSH LWKGLQEKFL KGEPKVLGVV QILTALMSLS  60
       MGITMMCMAS NTYGSNPISV YIGYTIWGSV MFIISGSLSI AAGIRTTKGL VRGSLGMNIT  120
       SSVLAASGIL INTFSLAFYS FHHPYCNYYG NSNNCHGTMS ILMGLDGMVL LLSVLEFCIA  180
65     VSLSAFGCKV LCCTPGGVVL ILPSHSHMAE TASPTPLNEV                       220

       Seq ID NO: C363 Protein Sequence
       Protein Accession #: NP_002082.1


70     1          11         21         31         41         51
       |          |          |          |          |          |
       MRGSELPLVL LALVLCLAPR GRAVPLPAGG GTVLTKMYPR GNHWAVGHLM GKKSTGESSS  60
       VSERGSLKQQ LREYIRWEEA ARNLLGLIEA KENRNHQPPQ PKALGNQQPS WDSEDSSNFK  120
       DVGSKGKVGR LSAPGSQREG RNPQLNQQ                                    148

75     Seq ID NO: C364 Protein Sequence
       Protein Accession #: NP_036393.1


       1          11         21         31         41         51
       |          |          |          |          |          |
80     MDLQGRGVPS IDRLRVLLML FHTMAQIMAE QEVENLSGLS TNPEKDIFVV RENGTTCLMA  60
       EPAAKFIVPY DVWASNYVDL ITEQADIALT RGAEVKGRCG HSQSELQVFW VDRAYALKML  120
       PVKESHNMSK GPEATWRLSK VQFVYDSSEK THFKDAVSAG KHTANSHHLS ALVTPAGKSY  180
       ECQAQQTISL ASSDPQKTVT MILSAVHIQP FDIISDFVFS EEHKCPVDER EQLEETLPLI  240
       LGLILGLVIM VTLAIYHVHH KMTANQVQIP RDRSQYKHMG                       280
```

Seq ID NO: C365 Protein Sequence
Protein Accession #: NP_003217.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MLGLVLALLS SSSAEEYVGL SANQCAVPAK DRVDCGYPHV TPKECNNRGC CFDSRIPGVP    60
WCFKPLTRKT ECTF                                                      74
```

Seq ID NO: C366 Protein Sequence
Protein Accession #: NP_002984.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MSLPSSRAAR VPGPSGSLCA LLALLLLLTP PGPLASAGPV SAVLTELRCT CLRVTLRVNP    60
KTIGKLQVFP AGPQCSKVEV VASLKNGKQV CLDPEAPFLK KVIQKILDSG NKKN         114
```

Seq ID NO: C367 Protein Sequence
Protein Accession #: NP_005233.2

```
1          11         21         31         41         51
|          |          |          |          |          |
MRSPSAAWLL GAAILLAASL SCSGTIQGTN RSSKGRSLIG KVDGTSHVTG KGVTVETVFS    60
VDEFSASVLT GKLTTVFLPI VYTIVFVVGL PSNGMALWVP LFRTKKKHPA VIYMANLALA   120
DLLSVIWFPL KIAYHIHANN WIYGEALCNV LIGFFYGNMY CSILFMTCLS VQRYWVIVNP   180
MGHSRKKANI AIGISLAIWL LILLVTIPLY VVKQTIFIPA LNITTCHDVL PEQLLVGDMP   240
NYFLSLAIGV FLFPAFLTAS AYVLMIRMLR SSAMDENSEK KRKRAIKLIV TVLAMYLICF   300
TPSNLLLVVH YPLIKSQGQS HVYALYIVAL CLSTLNSCID PFVYYFVSHD FRDHAKNALL   360
CRSVRTVKQM QVSLTSKKHS RKSSSYSSSS TTVKTSY                           397
```

Seq ID NO: C368 Protein Sequence
Protein Accession #: NP_003460.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MAEAKTHWLG AALSLIPLIF LISGAEAASF QRNQLLQKEP DLRLENVQKF PSPEMIRALE    60
YIENLRQQAH KEESSPDYNP YQGVSVPLQQ KENGDESHLP ERDSLSEEDW MRIILEALRQ   120
AENEPQSAPK ENKPYALNSE KNFPMDMSDD YETQQWPERK LKHMQFPPMY EENSRDNPFK   180
RTNEIVEBEQY TPQSLATLES VFQELGKLTG PNNQKRERMD EEQKLYTDDE DDIYKANNIA   240
YEDVVGGEDW NPVEEKIESQ TQEEVRDSKE NIGKNEQIND EMKRSGQLGI QEEDLRKESK   300
DQLSDDVSKV IAYLKRLVNA AGSGRLQNGQ NGERATRLFE KPLDSQSIYQ LIEISRNLQI   360
PPEDLIEMLK TGEKPNGSVE PERELDLPVD LDDISEADLD HPDLFQNRML SKSGYPKTPG   420
RAGTEALPDG LSVEDILNLL GMESAANQKT SYFPNPYNQE KVLPRLPYGA GRSRSNQLPK   480
AAWIPHVENR QMAYENLNDK DQELGEYLAR MLVKYPEIIN SNQVKRVPGQ GSSEDDLQEE   540
EQIEQAIKEH LNQGSSQETD KLAPVSKRPP VGPPKNDDTP NRQYWDEDLL MKVLEYLNQE   600
KAEKGREHIA KRAMENM                                                 617
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Seq ID NO: C369 Protein Sequence
Protein Accession #: NP_112217.1

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1          11         21         31         41         51
|          |          |          |          |          |
MPCAQRSWLA NLSVVAQLLN FGALCYGRQP QPGPVRFPDR RQEHFIKGLP EYHVVGPVRV    60
DASGHFLSYG LHYPITSSRR KRDLDGSEDW VYYRISHEEK DLFFNLTVNQ GFLSNSYIME   120
KRYGNLSHVK MMASSAPLCH LSGTVLQQGT RVGTAALSAC HGLTGFFQLP HGDFFIEPVK   180
KHPLVBGGYH PHIVYRRQKV PETKEPTCGL KDSVNISQKQ ELWREKWERH NLPSRSLSRR   240
SISKERWVET LVVADTKMIE YHGSENVESY ILTIMNMVTG LFHNPSIGNA IHIVVVRLIL   300
LEEEEQGLKI VHHAEKTLSS PCKWQKSINP KSDLNPVHHD VAVLLTRKDI CAGFNRPCBT   360
LGLSHLSGMC QPHRSCNINE DSGLPLAFTI AHELGHSFGI QHDGKENDCB PVGRHPYIMS   420
RQLQYDPTPL TWSKCSEEYI TRFLDRGWGF CLDDIPKKKG LKSKVIAPGV IYDVHHQCQL   480
QYGPNATFCQ EVENVCQTLW CSVKGFCRSK LDAAADGTQC GEKKWCMAGK CITVGKKPES   540
IPGGWGRWSP WSHCSRTCGA GVQSAERLCN NPEPKFGGKY CTGERKRYRL CNVHPCRSEA   600
PTFRQMQCSE FDTVPYKNEL YHWFPIFNPA HPCELYCRPI DGQFSEKMLD AVIDGTPCFE   660
GGNSRNVCIN GICKMVGCDY EIDSNATEDR CGVCLGDGSS CQTVRKMFKQ KEGSGYVDIG   720
LIPKGARDIR VMEIEGAGNF LAIRSEDPEK YYLNGGPIIQ WNGNYKLAGT VFQYDRKGDL   780
EKLMATGPTN ESVWIQLLFQ VTNPGIKYEY TIQKDGLDND VEQMYFWQYG HWTECSVTCG   840
TGIRRQTAHC IKKGRGMVKA TFCDPETQPN GRQKKCHEKA CPPRWWAGEW EACSATCGPH   900
GEKKRTVLCI QTMVSDEQAL PPTDCQHLLK PKTLLSCNRD ILCPSDWTVG NWSECSVSCG   960
GGVRIRSVTC AKNHDEPCDV TRKPNSRALC GLQQCPSSRR VLKPNKGTIS NGKNPPTLKP  1020
VPPPTSRPRM LTTPTGPESM STSTPAISSP SPTTASKEGD LGGKQWQDSS TQPELSSRYL  1080
ISTGSTSQPI LTSQSLSIQP SBENVSSSDT GPTSBGGLVA TTTSGSGLSS SRNPITWPVT  1140
PFYNTLTKGP EMBIHSGSGE EREQPEDKDE SNPVIWTKIR VPGNDAPVES TEMPLAPPLT  1200
PDLSRESWWP PFSTVMEGLL PSQRPTTSET GTPRVEGMVT EKPANTLLPL GGDHQPEPSG  1260
KTANRNHLKL PNNMNQTKSS EPVLTEEDAT SLITEGFLLN ASNYKQLTNG HGSAHWIVGN  1320
WSECSTTCGL GAYWKRVECT TQMDSDCAAI QRPDPAKRCH LRPCAGWKVG NWSKCSRNCS  1380
GGFKIREIQC VDSRDHRNLR PFHCQFLAGI PPPLSMSCNP EPCEAWQVEP WSQCSRSCGG  1440
GVQERGVFCP GGLCDWTKRP TSTMSCNEHL CCHWATGNWD LCSTSCGGGF QKRIVQCVPS  1500
EGNKTEDQDQ CLCDHKPRPP EPKKCNQQAC KKSADLLCTK DKLSASFCQT LKAMKKCSVP  1560
TVRAECCFSC PQTHITHTQR QRRQRLLQKS KEL                              1593
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Seq ID NO: C370 Protein Sequence
Protein Accession #: NP_001053.1

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1          11         21         31         41         51
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|         |         |         |         |         |
 MRQSHQLPLV GLLLFSPIPS QLCEICEVSE ENYIRLKPLL NTMIQSNYNR GTSAVNVVLS    60
 LKLVGIQIQT LMQKMIQQIK YNVKSRLSDV SSGELALIIL ALGVCRNAEE NLIYDYHLTD   120
 KLENKFQAEI ENMEAHNGTP LTNYYQLSLD VLALCLFNGN YSTAEVVNHF TPENKNYYFG   180
 SQFSVDTGAM AVLALTCVKK SLINGQIKAD EGSLKNISIY TKSLVEKILS EKKENGLIGN   240
 TFSTGEAMQA LPVSSDYYNE NDWNCQQTLN TVLTEISQGA PSNPNAAAQV LPALMGKTFL   300
 DINKDSSCVS ASGNFNISAD EPITVTPPDS QSYISVNYSV RINETYFTNV TVLNGSVPLS   360
 VMEKAQKMND TIFGFTMEER SWGPYITCIQ GLCANNNDRT YWELLSGGEP LSQGAGSYVV   420
 RNGENLEVRW SKY                                                      433

Seq ID NO: C371 Protein Sequence
Protein Accession #: NP_004582.1


  1         11        21        31        41        51
  |         |         |         |         |         |
 MCCTKSLLLA ALMSVLLLHL CGESEAASNP DCCLGYTDRI LHPKFIVGFT RQLANEGCDI    60
 NAIIFHTKKK LSVCANPKQT WVKYIVRLLS KKVKNM                              96

Seq ID NO: C372 Protein Sequence
Protein Accession #: NP_037403.1


  1         11        21        31        41        51
  |         |         |.        |         |         |
 MAGSPLLWGP RAGGVGLLVL LLLGLFRPPP ALCARPVKEP RGLSAASPPL AETGAPRRFR    60
 RSVPRGEAAG AVQELARALA HLLEAERQER ARAEAQEAED QQARVLAQLL RVWGAPRNSD   120
 PALGLDDDPD APAAQLARAL LRARLDPAAL AAQLVPAPVP AAALRPRPPV YDDGPAGPDA   180
 EEAGDETPDV DPELLRYLLG RILAGSADSE GVAAPRRLRR AADHDVGSEL PPEGVLGALL   240
 RVKRLETPAP QVPARRLLPP                                               260

Seq ID NO: C373 Protein Sequence
Protein Accession #: NP_002236.1


  1         11        21        31        41        51
  |         |         |         |         |         |
 MLQSLAGSSC VRLVERHRSA WCFGPLVLGY LLYLVFGAVV FSSVELPYED LLRQELRKLK    60
 RRFLEEHECL SEQQLEQFLG RVLEASNYGV SVLSNASGNW NWDFTSALFF ASTVLSTTGY   120
 GHTVPLSDGG KAFCIIYSVI GIPPTLLFLT AVVQRITVHV TRRPVLYFHI RWGFSKQVVA   180
 IVHAVLLGFV TVSCFFFIPA AVFSVLEDDW NFLESPYPCF ISLSTIGLGD YVPGEGYNQK   240
 FRELYKIGIT CYLLLGLIAM LVVLETFCEL HELKKFRKMF YVKKDKDEDQ VHIIEHDQLS   300
 FSSITDQAAG MKEDQKQNEP FVATQSSACV DGPANH                            336

Seq ID NO: C374 Protein Sequence
Protein Accession #: NP_005463.1


  1         11        21        31        41        51
  |         |         |         |         |         |
 METTNGTETW YESLHAVLKA LNATLHSNLL CRPGPGLGPD NQTEERRASL PGRDDNSYMY    60
 ILFVMFLFAV TVGSLILGYT RSRKVDKRSD PYHVYIKNRV SMI                     103

Seq ID NO: C375 Protein Sequence
Protein Accession #: NP_005236.1


  1         11        21        31        41        51
  |         |         |         |         |         |
 MGRHLALLLL LLLLFQHFGD SDGSQRLEQT PLQFTHLEYN VTVQENSAAK TYVGHPVKMG  · 60
 VYITHPAWEV RYKIVSGDSE NLPKAEEYIL GDPCFLRIRT KGGNTAILNR EVKDHYTLIV   120
 KALEKNTNVE ARTKVRVQVL DTNDLRPLFS PTSYSVSLPE NTAIRTSIAR VSATDADIGT   180
 NGEFYYSFKD RTDMPAIHPT SGVIVLTGRL DYLETKLYEM EILAADRGMK LYGSSGISSM   240
 AKLTVHIEQA NECAPVITAV TLSPSELDRD PAYAIVTVDD CDQGANGDIA SLSIVAGDLL   300
 QQFRTVRSFP GSKEYKVKAI GDIDWDSHPF GYNLTLQAKD KGTPPQFSSV KVIHVTSPQF   360
 KAGPVKFEKD VYRAEISEPA PPNTPVVMVK AIPAYSHLRY VFKRTPGKAK FSLNYNTGLI   420
 SILEPVKRQQ AAHFELEVTT SDRKASTKVL VKVLGANSNP PEFTQTAYKA AFDENVPIGT   480
 TIMSLSAVDP DEGENGYVTY SIANLNHVPF AIDHFTGAVS TSENLDYELM PRVYTLRIRA   540
 SDWGLPYRRE VEVLATITLN NLNDNTPLFE KINCEGTIPR DLGVGEQITT VSAIDADELQ   600
 LVQYQIEAGN ELDLFSLNPN SGVLSLKRSL MDGLGAKVSP HSLRITATDG ENFATPLYIN   660
 ITVAASHKLV NLQCEETGVA KMLAEKLLQA NKLHNQGEVE DIFFDSHSVN AHIPQFRSTL   720
 PTGIQVKENQ PVGSSVIFMN STDLDTGFNG KLVYAVSGGN EDSCFMIDME TGMLKILSPL   780
 DRETTDKYTL NITVYDLGIP QKAAWRLLHV VVVDANDNPP EPLQESYFVE VSEDKEVHSE   840
 IIQVEATDKD LGPNGHVTYS ILTDTDTFSI DSVTGVVNIA RPLDRELQHE HSLKIEARDQ   900
 AREEPQLFST VVVKVSLEDV NDNPPTFIPP NYRVKVREDL PEGTVIMWLE AHDPDLGQSG   960
 QVRYSLLDHG EGNFDVDKLS GAVRIVQQLD FEKKQVYNLT VRAKDKGKPV SLSSTCYVEV  1020
 EVVDVNENLH PPVFSSFVEK GTVKEDAPVG SLVMTVSAHD EDAGRDGEIR YSIRDGSGVG  1080
 VPKIGEETGV IETSDRLDRE STSHYWLTVF ATDQGVVPLS SPIEIYIEVE DVNDNAPQTS  1140
 EPVYYPEIME NSPKDVSVVQ IEAFDPDSSS NDKLMYKITS GNPQGFFSIH PKTGLITTTS  1200
 RKLDREQQDE HILEVTVTDN GSPPKSTIAR VIVKILDEND NKPQFLQKFY KIRLPEREKP  1260
 DRERNARREP LYRVIATDKD EGPNAEISYS IEDGNEHGKF PIEPKTGVVS SKRFSAAGEY  1320
 DILSIKAVDN GRPQKSSTTR LHIEWISKPK QSLEPISFEE SFFTFTVMES DPVAHMIGVI  1380
 SVEPPGIPLW FDITGGNYDS HFDVDKGTGT IIVAKPLDAE QKSNYNLTVE ATDGTTTILT  1440
 QVPIKVIDTN DHRPQFSTSK YEVVIPEDTA PETEILQISA VDQDEKNKLI YTLQSSRDPL  1500
 SLKKFRLDPA TGSLYTSEKL DHEAVSPAHL TVMVRDQDVP VKRNFARIVV NVSDTNDHAP  1560
 WFTASSYKGR VYESAAVGSV VLQVTALDKD KGKNAEVLYS IESGNIGNIG NSFMIDPVLG  1620
 SIKTAKELDR SNQAEYDLMV KATDKGSPPM SEITSVRIFV TIADNASPKF TSKEYSVELS  1680
 ETVSIGSFVG MVTAHSQSSV VYEIKDGNTG DAFDINPHSG TIITQKALDF ETLPIYTLII  1740
 QGTNMAGLST NTTVLVHLQD ENDNAPVFMQ AEYTGLISES ASINSVVLTD RNVPLVIRAA  1800
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        DADKDSNALL VYHIVEPSVH TYFAIDSSTG AIHTVLSLDY EETSIFHFTV QVHDMGTPRL   1860
        FAEYAANVTV HVIDINDCPP VFAKPLYEAS LLLPTYKGVK VITVNATDAD SSAFSQLIYS   1920
        ITEGNIGEKF SMDYKTGALT VQNTTQLRSR YELTVRASDG RFAGLTSVKI NVKESKESHL   1980
        KFTQDVYSAV VKENSTEAET LAVITAIGSP INEPLFYHIL NPDRRPKISR TSGVLSTTGT   2040
5       PFDREQQEAF DVVVEVIEEH KPSAVAHVVV KVIVEDQNDN APVFVNLPYY AVVKVDTEVG   2100
        HVIRYVTAVD RDSGRNGEVH YYLKEHHEHF QIGPLGEISL KKQPELDTLN KEYLVTVVAK   2160
        DGGNPAFSAE VIVPITVMNK AMPVFEKPFY SAEIAESIQV HSPVVHVQAN SPEGLKVFYS   2220
        ITDGDPFSQF TINFNTGVIN VIAPLDFEAH PAYKLSIRAT DSLTGAHAEV FVDIIVDDIN   2280
        DNPPVFAQQS YAVTLSEASV IGTSVVQVRA TDSDSEPNRG ISYQMFGNHS KSHDHFHVDS   2340
10      STGLISLLRT LDYEQSRQHT IFVRAVDGGM PTLSSDVIVT VDVTDLNGNP PLFEQQIYEA   2400
        RISEHAPHGH FVTCVKAYDA DSSDIDKLQY SILSGNDHKH FVIDSATGII TLSNLHRHAL   2460
        KPFYSLNLSV SDGVFRSSTQ VHVTVIGGNL HSPAFLQNEY EVELAENAPL HTLVMEVKTT   2520
        DGDSGIYGHV TYHIVNDFAK DRFYINERGQ IFTLEKLDRE TPAEKVISVR LMAKDAGGKV   2580
        AFCTVNVILT DDNDNAPQFR ATKYEVNIGS SAAKGTSVVK SASDADEGSN ADITYAIEAD   2640
15      SESVKENLEI NKLSGVITTK ESLIGLENEF FTFFVRAVDN GSPSKESVVL VYVKILPPEM   2700
        QLPKFSEPFY TFTVSEDVPV GTEIDLIRAE HSGTVLYSLV KGNTPESNRD ESFVIDRQSG   2760
        RLKLEKSLDH ETTKWYQFSI LARCTQDDHE MVASVDVSIQ VKDANDNSPV FESSPYEAFI   2820
        VENLPGGSRV IQIRASDADS GTNGQVMYSL DQSQSVBVIB SFAINMETGW ITTLKELDHE   2880
        KRDNYQIKVV ASDHGEKIQL SSTAIVDVTV TDVNDSPPRF TAEIYKGTVS EDDPQGGVIA   2940
20      ILSTTDADSE EINRQVTYFI TGGDPLGQFA VETIQNEWKV YVKKPLDREK RDNYLLTITA   3000
        TDGTFSSKAI VEVKVLDAND NSPVCEKTLY SDTIPEDVLP GKLIMQISAT DADIRSNAEI   3060
        TYTLLGSGAE KPKLNPDTGE LKTSTPLDRE EQAVYHLLVR ATDGGGRFCQ ASIVVTLEDV   3120
        NDNAPEFSAD PYAITVFENT EPGTLLTRVQ ATDADAGLNR KILYSLIDSA DGQFSINELS   3180
        GIIQLEKPLD RELQAVYTLS LKAVDQGLPR RLTATGTVIV SVLDINDNPP VFEYREYGAT   3240
25      VSEDILVGTE VLQVYAASRD IEANAEITYS IISGNEHGKF SIDSKTGAVF IIENLDYESS   3300
        HEYYLTVEAT DGGTPSLSDV ATVNVNVTDI NDNTPVFSQD TYTTVISEDA VLEQSVITVM   3360
        ADDADGPSNS HIHYSIIDGN QGSSFTIDPV RGEVKVTKLL DRETISGYTL TVQASDNGSP   3420
        PRVNTTTVNI DVSDVNDNAP VFSRGNYSVI IQENKPVGFS VLQLVVTDED SSHNGPPPPP   3480
        TIVTGNDEKA FEVNPQGVLL TSSAIKRKEK DHYLLQVKVA DNGKPQLSSL TYIDIRVIEE   3540
30      SIYPPAILPL EIFITSSGEE YSGGVIGKIH ATDQDVYDTL TYSLDPQMDN LFSVSSTGGK   3600
        LIAHKKLDIG QYLLNVSVTD GKFTTVADIT VHIRQVTQEM LNHTIAIRFA NLTPEEFVGD   3660
        YWRNFQRALR NILGVRRNDI QIVSLQSSEP HPHLDVLLFV EKPGSAQIST KQLLHKINSS   3720
        VTDIEEIIGV RILNVFQKLC AGLDCPWKFC DEKVSVDESV MSTHSTARLS FVTPRHHRAA   3780
        VCLCKEGRCP PVHHGCEDDP CPEGSECVSD PWEEKHTCVC PSGRFGQCPG SSSMTLTGNS   3840
35      YVKYRLTENE NKLEMKLTMR LRTYSTHAVV MYARGTDYSI LEIHHGRLQY KFDCGSGPGI   3900
        VSVQSIQVND GQWHAVALEV NGNYARLVLD QVHTASGTAP GTLKTLNLDN YVFFGGHIRQ   3960
        QGTRHGRSPQ VGNGFRGCMD SIYLNGQELP LNSKPRSYAH IEESVDVSPG CFLTATEDCA   4020
        SNPCQNGGVC NPSPAGGYYC KCSALYIGTH CEISVNPCSS NPCLYGGTCV VDNGGFVCQC   4080
        RGLYTGQRCQ LSPYCKDEPC KNGGTCFDSL DGAVCQCDSG FRGERCQSDI DECSGNPCLH   4140
40      GALCENTHGS YHCNCSHEYR GRHCEDAAPN QYVSTPWNIG LAEGIGIVVF VAGIFLLVVV   4200
        FVLCRKMISR KKKHQAEPKD KHLGPATAFL QRPYFDSKLN KNIYSDIPPQ VPVRPISYTP   4260
        SIPSDSRNNL DRNSFEGSAI PEHPEFSTFN PESVHGERKA VAVCSVAPNL PPPPPSNSPS   4320
        DSDSIQKPSW DFDYDTKVVD LDPCLSKKPL EEKPSQPYSA RESLSEVQSL SSFQSBSCDD   4380
        NGYHWDTSDW MPSVPLPDIQ EFPNYEVIDE QTPLYSADPN AIDTDYYPGG YDIESDFPPP   4440
45      PEDFPAADEL PPLPPEFSNQ FESIHPPRDM PAAGSLGSSS RNRQRFNLNQ YLPNFYPLDM   4500
        SEPQTKGTGE NSTCREPHAP YPPGYQRHFE APAVESMPMS VYASTASCSD VSACCEVESE   4560
        VMMSDYESGD DGHFEEVTIP PLDSQQHTEV                                    4590
```

Seq ID NO: C376 Protein Sequence
Protein Accession #: NP_055035.1

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        1          11         21         31         41         51
        |          |          |          |          |          |
        MCYGKCARCI GHSLVGLALL CIAANILLYF PNGETKYASE NHLSRFVWPF SGIVGGGLLM   60
        LLPAFVFIGL EQDDCCGCCG HENCGKRCAM LSSVLAALIG IAGSGYCVIV AALGLAEGPL   120
        CLDSLGQWNY TPASTEGQYL LDTSTWSECT EPKHIVEWNV SLFSILLALG GIEFILCLIQ   180
        VINGVLGGIC GFCCSHQQQY DC                                            202
```

Seq ID NO: C377 Protein Sequence
Protein Accession #: NP_003750.1

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        1          11         21         31         41         51
        |          |          |          |          |          |
        MSTENVEGKP SNLGERGRAR SSTFLRVVQP MFNHSIFTSA VSPAAERIRF ILGEEDDSPA   60
        PPQLFTELDE LLAVDGQEME WKETARWIKF EEKVEQGGER WSKPHVATLS LHSLFELRTC   120
      . MEKGSIMLDR EASSLPQLVE MIVDHQIETG LLKPBLKDKV TYTLLRKHRH QTKKSNLRSL   180
        ADIGKTVSSA SRMFTNPDNG SPAMTHRNLT SSSLNDISDK PERDQLKNKF MKKLPRDAEA   240
        SNVLVGEVDF LDTPPIAFVR LQQAVMLGAL TEVPVPTRFL FILLGPKGKA KSYHEIGRAI   300
        ATLMSDEVFH DIAYKAKDRH DLIAGIDEFL DEVIVLPPGE WDPAIRIEPP KSLPSSDKRK   360
        NMYSGGENVQ MNGDTPHDGG HGGGGHGDCE ELQRTGRFCG GLIKDIKRKA PFFASDFYDA   420
        LNIQALSAIL FIYLATVTNA ITFGGLLGDA TDNMQGVLES FLGTAVSGAI FCLFAGQPLT   480
        ILSSTGPVLV FERLLFNFSK DNNFDYLEFR LWIGLWSAFL CLILVATDAS FLVQYFTRFT   540
        EEGFSSLISF IFIYDAFKKM IKLADYYPIN SNFKVGYNTL FSCTCVPPDP ANISISNDTT   600
        LAPEYLPTMS STDMYHNTTF DWAFLSKKEC SKYGGNLVGN NCNFVPDITL MSFILFLGTY   660
        TSSMALKKFK TSPYFPTTAR KLISDFAIIL SILIFCVIDA LVGVDTPKLI VPSEFKPTSP   720
        NRGWFVPPFG ENPWWVCLAA AIPALLVTIL IFMDQQITAV IVNRKEHKLK KGAGYHLDLF   780
        WVAILMVICS LMALPWYVAA TVISIAHIDS LKMETETSAP GEQPKFLGVR EQRVTGTLVF   840
        ILTGLSVFMA PILKFIPMPV LYGVFLYMGV ASLNGVQFMD RLKLLLMPLK HQPDFIYLRH   900
        VPLRRVHLFT FLQVLCLALL WILKSTVAAI IPPVMILALV AVRKGMDYLF SQHDLSFLDD   960
        VIPEKDKKKK EDEKKKKKKK GSLDSDNDDS DCPYSEKVPS IKIPMDIMEQ QPFLSDSKPS   1020
        DRERSPTFLE RHTSC                                                   1035
```

Seq ID NO: C378 Protein Sequence
Protein Accession #: NP_000949.1

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         1          11         21         31         41         51
         |          |          |          |          |          |
 5    MSTPGVNSSA SLSPDRLNSP VTIPAVMFIF GVVGNLVAIV VLCKSRKEQK ETTFYTLVCG    60
      LAVTDLLGTL LVSPVTIATY MKGQWPGGQP LCEYSTFILL FFSLSGLSII CAMSVERYLA   120
      INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPNMGLGS SRLQYPDTWC FIDWTTNVTA   180
      HAAYSYMYAG FSSFLILATV LCNVLVCGAL LRMHRQFMRR TSLGTEQHHA AAAASVASRG   240
      HPAASPALPR LSDFRRRRSF RRIAGAEIQM VILLIATSLV VLICSIPLVV RVFVNQLYQP   300
10    SLEREVSKNP DLQAIRIASV NPILDPWIYI LLRKTVLSKA IEKIKCLFCR IGGSRRERSG   360
      QHCSDSQRTS SAMSGHSRSF ISRELKEISS TSQTLLPDLS LPDLSENGLG GRNLLPGVPG   420
      MGLAQEDTTS LRTLRISETS DSSQGQDSES VLLVDEAGGS GRAGPAPKGS SLQVTFPPSET  480
      LNLSEKCI                                                            488
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         1          11         21         31         41         51
         |          |          |          |          |          |
      MGHPPLLPLL LLLHTCVPAS WGLRCMQCKT NGDCRVEECA LGQDLCRTTI VRLWEEGEEL    60
      ELVEKSCTHS EKTNRTLSYR TGLKITSLTE VVCGLDLCNQ GNSGRAVTYS RSRYLECISC   120
      GSSDMSCERG RHQSLQCRSP EEQCLDVVTH WIQEGEEGRP KDDRHLRGCG YLPGCPGSNG   180
      FHNNDTFHFL KCCNTTKCNE GPILELENLP QNGRQCYSCK GNSTHGCSSE ETFLIDCRGP   240
      MNQCLVATGT HEPKNQSYMV RGCATASMCQ HAHLGDAFSM NHIDVSCCTK SGCNHPDLDV   300
      QYRSGAAPQP GPAHLSLTIT LLMTARLWGG TLLWT                               335
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         1          11         21         31         41         51
         |          |          |          |          |          |
      MDFESGQVDP LASVILPPNL LENLSPEDSV LVRRAQFTPF NKTGLFQDVG PQRKTLVSYV    60
      MACSIGNITI QNLKDPVQIK IKHTRTQEVH HPICAFWDLN KNKSFGGHWNT SGCVAHRDSD   120
      ASETVCLCNH FTHFGVLMDL PRSASQLDAR NTKVLTPISY IGCGISAIFS AATLLTYVAF   180
      EKLRRDYPSK ILMNLSTALL FLNLLFLLDG WITSFNVDGL CIAVAVLLHF FLLATFTWMG   240
      LEAIHMYIAL VKVFNTYIRR YILKFCIIGW GLPALVVSVV LASRNNNEVY GKESYGKEKG   300
      DEFCWIQDPV IFYVTCAGYF GVMFFLNIAM FIVVMVQICG RNGKRSNRTL REEVLRNLRS   360
      VVSLTPLLGM TWGFAFFAWG PLNIPFMYLP SIFNSLQGLF IFIFHCAMKE NVQKQWRRHL   420
      CCGRFRLADN SDWSKTATNI IKKSSDNLGK SLSSSSIGSN STYLTSKSKS SSTTYPKRNS   480
      HTDNVSYEHS FNKSGSLRQC PHGQVLVKTG PC                                 512
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         1          11         21         31         41         51
         |          |          |          |          |          |
      MTVARPSVPA ALPLLGELPR LLLLVLLCLP AVWGDCGLPP DVPNAQPALE GRTSFPEDTV    60
      ITYKCEESFV KIPGEKDSVI CLKGSQWSDI EEPCNRSCEV PTRLNSASLK QPYITQNYFP   120
      VGTVVEYECR PGYRREPSLS PKLTCLQNLK WSTAVEFCKK KSCPNPGEIR NGQIDVPGGI   180
      LFGATISFSC NTGYKLFGST SSFCLISGSS VQWSDPLPEC REIYCPAPPQ IDNGIIQGER   240
      DHYGYRQSVT YACNKGPTMI GEHSIYCTVN NDEGEWSGPP PECRGKSLTS KVPPTVQKPT   300
      TVNVPTTEVS PTSQKTTTKT TTPNAQATRS TPVSRTTKHP HETTPNKGSG TTSGTTRLLS   360
      GHTCFTLTGL LGTLVTMGLL T                                             381
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         1          11         21         31         41         51
         |          |          |          |          |          |
      MDTSRLGVLL SLPVLLQLAT GGSSPRSGVL LRGCPTHCHC EPDGRMLLRV DCSDLGLSEL    60
      PSNLSVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKGAF TGLYSLKVLM   120
      LQNNQLRHVP TEALQNLRSL QSLRLDANHI SYVPPSCFSG LHSLRHLWLD DNALTEIPVQ   180
      AFRSLSALQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RIHSLGKKCF DGLHSLETLD   240
      LNYNNLDEFP TAIRTLSNLK ELHFYDNPIQ FVGRSAFQHL PELRTLTLNG ASQITEFPDL   300
      TGTANLESLT LTGAQISSLP QTVCNQLPNL QVLDLSYNLL EDLPSFSVCQ KLQKIDLRHN   360
      EIYEIKVDTF QQLLSLRSLN LAWNKIAIIH PNAFSTLPSL IKLDLSSNLL SSFPITGLHG   420
      LTHLKLTGNH ALQSLISSEN FPELKVIEMP YAYQCCAFGV CENAYKISNQ WNKGDNSSMD   480
      DLHKKDAGMF QAQDERDLED FLLDFEEDLK ALHSVQCSPS PGPFKPCEHL LDGWLIRIGV   540
      WTIAVLALTC NALVTSTVFR SPLYISPIKL LIGVIAAVNM LTGVSSAVLA GVDAFTFGSF   600
      ARHGAWWENG VGCHVIGFLS IFASESSVFL LTLAALERGF SVKYSAKFET KAPFSSLKVI   660
      ILLCALLALT MAAVPLLGGS KYGASPLCLP LPFGEPSTMG YMVALILLNS LCFLMMTIAY   720
      TKLYCNLDKG DLENIWDCSM VKHIALLLFT NCILNCPVAF LSFSSLINLT FISPEVIKFI   780
      LLVVVPLPAC LNPLLYILFN PHFKEDLVSL RKQTYVWTRS KHPSLMSINS DDVEKQSCDS   840
      TQALVTFTSS SITYDLPPSS VPSPAYPVTE SCHLSSVAFV PCL                     883
```

```
         1          11         21         31         41         51
         |          |          |          |          |          |
      MDTSRLGVLL SLPVLLQLAT GGSSPRSGVL LRGCPTHCHC EPDGRMLLRV DCSDLGLSEL    60
      PSNLSVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKGAF TGLYSLKVLM   120
      LQNNQLRHVP TEALQNLRSL QSLRLDANHI SYVPPSCFSG LHSLRHLWLD DNALTEIPVQ   180
      AFRSLSALQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RIHSLGKKCF DGLHSLETLD   240
      LNYNNLDEFP TAIRTLSNLK ELGFHSNNIR SIPEKAFVGN PSLITIHFYD NPIQFVGRSA   300
```

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FQHLPELRTL TLNGASQITE FPDLTGTANL ESLTLTGAQI SSLPQTVCNQ LPNLQVLDLS    360
YNLLEDLPSF SVCQKLQKID LRHNEIYEIK VDTFQQLLSL RSLNLAWNKI AIIHPNAFST    420
LPSLIKLDLS SNLLSSFPIT GLHGLTHLKL TGNHALQSLI SSENFPELKV IEMPYAYQCC    480
AFGVCENAYK ISNQWNKGDN SSMDDLHKKD AGMFQAQDER DLEDFLLDFE EDLKALHSVQ    540
CSPSPGPFKP CEHLLDGWLI RIGVWTIAVL ALTCNALVTS TVFRSPLYIS PIKLLIGVIA    600
AVNMLTGVSS AVLAGVDAFT FGSFARHGAW WENGVGCHVI GFLSIFASES SVFLLTLAAL    660
ERGFSVKYSA KFETKAPFSS LKVIILLCAL LALTMAAVPL LGGSKYGASP LCLPLPFGEP    720
STMGYMVALI LLNSLCFLMM TIAYTKLYCN LDKGDLENIW DCSMVKHIAL LLFTNCILNC    780
PVAFLSFSSL INLTFISPEV IKFILLVVVP LPACLNPLLY .ILFNPHFKED LVSLRKQTYV    840
WTRSKHPSLM SINSDDVEKQ SCDSTQALVT FTSSSITYDL PPSSVPSPAY PVTESCHLSS    900
VAFVPCL                                                              907
```

Seq ID NO: C384 Protein Sequence
Protein Accession #: NP_003497.1

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 1          11          21          31          41          51
 |          |           |           |           |           |
MEMFTFLLTC IFLPLLRGHS LFTCEPITVP RCMKMAYNMT FFPNLMGHYD QSIAAVEMEH     60
FLPLANLECS PNIETFLCKA FVPTCIEQIH VVPPCRKLCE KVYSDCKKLI DTFGIRWPEE    120
LECDRLQYCD ETVPVTFDPH TEFLGPQKKT EQVQRDIGFW CPRHLKTSGG QGYKPLGIDQ    180
CAPPCPNMYP KSDELEFAKS FIGTVSIFCL CATLFTPLTF LIDVRRFRYP ERPIIYYSVC    240
YSIVSLMYFI GFLLGDSTAC NKADEKLELG DTVVLGSQNK ACTVLFMLLY FFTMAGTVWW    300
VILTITWFLA AGRKWSCEAI EQKAVWFHAV AWGTPGFLTV MLLALNKVEG DNISGVCFVG    360
LYDLDASRYF VLLPLCLCVP VGLSLLLAGI ISLNHVRQVI QHDGRNQEKL KKFMIRIGVF    420
SGLYLVPLVT LLGCYVYEQV NRITWEITWV SDHCRQYHIP CPYQAKAKAR PELALFMIKY    480
LMTLIVGISA VFWVGSKKTC TEWAGPFKRN RKRDPISESR RVLQESCBFF LKHNSKVKHK    540
KKHYKPSSHK LKVISKSMGT STGATANHGT SAVAITSHDY LGGQBTLTEIQ TSPETSMREV    600
KADGASTPRL REQDCGEPAS PAASISRLSG EQVDGKGQAG SVSESARSEG RISPKSDITD    660
TGLAQSNNLQ VPSSSEPSSL KGSTSLLVHP VSGVRKEQGG GCHSDT                   706
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Seq ID NO: C385 Protein Sequence
Protein Accession #: NP_000573

```
 1          11          21          31          41          51
 |          |           |           |           |           |
MRIAVICFCL LGITCAIPVK QADSGSSEEK QLYNKYPDAV ATWLNPDPSQ KQNLLAPQTL     60
PSKSNESHDH MDDMDDEDDD DHVDSQDSID SNDSDDVDDT DDSHQSDESH HSDESDELVT    120
DFPTDLPATE VFTPVVPTVD TYDGRGDSVV YGLRSKSKKF RRPDIQYPDA TDEDITSHME    180
SEELNGAYKA IPVAQDLNAP SDWDSRGKDS YETSQLDDQS AETHSHKQSR LYKRKANDES    240
NEHSDVIDSQ ELSKVSREFH SHEFHSHEDM LVVDPKSKEE DKHLKFRISH ELDSASSEVN    300
```

Seq ID NO: C386 Protein Sequence
Protein Accession #: NP_002812

```
 1          11          21          31          41          51
 |          |           |           |           |           |
MGAARGSPAR PRRLPLLSVL LLPLLGGTQT AIVFIKQPSS QDALQGRRAL LRCEVEAPGP     60
VHVYWLLDGA PVQDTERRPA QGSSLSFAAV DRLQDSGTFQ CVARDDVTGE EARSANASFN    120
IKWIEAGFVV LKHPASEAEI QPQTQVTLRC HIDGHPRPTY QWFRDGTPLS DGQSNHTVSS    180
KERNLTLRPA GPEHSGLYSC CAHSAFGQAC SSQNFTLSIA DESFARVVLA PQDVVVARYE    240
EAMFHCQPSA QPPPSLQWLF EDETPITNRS RPPHLRRATV FANGSLLLTQ VRPRNAGIYR    300
CIGQGQRGPP IILEATLHLA EIEDMPLFEP RVFTAGSEER VTCLPPKGLP EPSVWWEHAG    360
VRLPTHGRVY QKGHELVLAN IAESDAGVYT CHAANLAGQR RQDVNITVAT VPSWLKKPQD    420
SQLEEGKPGY LDCLTQATPK PTVVWYRNQM LISEDSRFEV FKNGTLRINS VEVYDGTWYR    480
CMSSTPAGSI EAQARVQVLE KLKFTPPPQP QQCMEFDKEA TVPCSATGRE KPTIKWERAD    540
GSSLPEWVTD NAGTLHPARV TRDDAGNYTC IASNGPQGQI RAHVQLTVAV FITFKVEPER    600
TTVYQGHTAL LQCEAQGDPK PLIQWKGKDR ILDPTKLGPR MHIFQNGSLV IHDVAPEDSG    660
RYTCIAGNSC NIKHTEAPLY VVDKPVPEES EGPGSPPPYK MIQTIGLSVG AAVAYIIAVL    720
GLMFYCKKRC KAKRLQKQPE GEEPEMECLN GGPLQNGQPS AEIQEEVALT SLGSGPAATN    780
KRHSTSDKMH FPRRSSLQPIT TLGKSEFGEV FLAKAQGLEE GVAETLVLVK SLQTKDEQQQ    840
LDFRRELEMF GKLNHANVVR LLGLCREAEP HYMVLEYVDL GDLKQFLRIS KSKDEKLKSQ    900
PLSTKQKVAL CTQVALGMEH LSNNRFVHKD LAARNCLVSA QRQVKVSALG LSKDVYNSEY    960
YHFRQAWVPL RWMSPEAILE GDFSTKSDVW APGVLMWEVF THGEMPHGGQ ADDEVLADLQ   1020
AGKARLPQPE GCPSKLYRLM QRCWALSPKD RPSFSEIASA LGDSTVDSKP              1070
```

Seq ID NO: C387 Protein Sequence
Protein Accession #: NP_002300.1

```
 1          11          21          31          41          51
 |          |           |           |           |           |
MKVLAAGVVP LLLVLHWKHG AGSPLPITPV NATCAIRHPC HNNLMNQIRS QLAQLNGSAN     60
ALPILYYTAQ GEPFPNNLDK LCGPNVTDFP PFHANGTEKA KLVELYRIVV YLGTSLGNIT    120
RDQKILNPSA LSLHSKLNAT ADILRGLLSN VLCRLCSKYH VGHVDVTYGP DTSGKDVFQK    180
KKLGCQLLGK YKQIIAVLAQ AF                                             202
```

Seq ID NO: C388 Protein Sequence
Protein Accession #: XP_097508

```
 1          11          21          31          41          51
 |          |           |           |           |           |
MGRPRLTLVC HVSIIISARD LSMNNLTELQ PGLFHHLRFL EELRLSGNHL SHIPGQAFSG     60
LYSLKILMLQ NNQLGGIPAE ALWELPSLQS LRLDANLISL VPERSFEGLS SLRHLWLDDN    120
ALTEIPVRAL NNLPALQAMT LALNRISHIP DYAFQNLTSL VVLHLHNNRI QHLGTHSFEG    180
LHNLETLDLN YNKLQEFPVA IRTLGRLQEL GFHNNNIKAI PEKAFMGNPL LQTIHFYDNP    240
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          IQFVGRSAFQ  YLPKLHTLSL  NGAMDIQEFP  DLKGTTSLEI  LTLTRAGIRL  LPSGMCQQLP   300
          RLRVLELSHN  QIEELPSLHR  CQKLEEIGLQ  HNRIWEIGAD  TFSQLSSLQA  LDLSWNAIRS   360
          IHPEAFSTLH  SLVKLDLTDN  QLTTLPLAGL  GGLMHLKLKG  NLALSQAFSK  DSFPKLRILE   420
          VPYAYQCCPY  GMCASFFKAS  GQWEAEDLHL  DDEESSKRPL  GLLARQAENH  YDQDLDELQL   480
5         EMEDSKPHPS  VQCSPTPGPF  KPCEYLFESW  GIRLAVWAIV·LLSVLCNGLV  LLTVFAGGPV   540
          PLPPVKFVVG  AIAGANTLTG  ISCGLLASVD  ALTFGQFSEY  GARWETGLGC  RATGFLAVLG   600
          SEASVLLLTL  AAVQCSVSVS  CVRAYGKSPS  LGSVRAGVLG  CLALAGLAAA  LPLASVGEYG   660
          ASPLCLPYAP  PEGQPAALGF  TVALVMMNSF  CPLVVAGAYI  KLYCDLPRGD  FEAVWDCAMV   720
10        RHVAWLIFAD  GLLYCPVAFL  SFASMLGLFP  VTPEAVKSVL  LVVLPLPACL  NPLLYLLFNP   780
          HFRDDLRRLR  PRAGDSGPLA  YAAAGELEKS  SCDSTQALVA  FSDVDLILEA  SEAGRPPGLE   840
          TYGFPSVTLI  SCQQPGAPRL  EGSHCVEPEG  NHFGNPQPSM  DGELLLRAEG  STPAGGGLSG   900
          GGGFQPSGLA  FASHV                                                       915
```

Seq ID NO: C389 Protein Sequence
Protein Accession #: NP_570901

```
          1           11          21          31          41          51
          |           |           |           |           |           |
          MASLVSLELG  LLLAVLVVTA  TASPPAGLLS  LLTSGQGALD  QEALGGLLNT  LADRVHCTNG   60
          PCGKCLSVED  ALGLGEPEGS  GLPPGPVLEA  RYVARLSAAA  VLYLSNPEGT  CEDTRAGLWA   120
          SHADHLLALL  ESPKALTPGL  SWLLQRMQAR  AAGQTPKTAC  VDIPQLLEEA  VGAGAPGSAG   180
          GVLAALLDHV  RSGSCFHALP  SPQYFVDFVF  QQHSSEVPMT  LAELSALMQR  LGVGREAHSD   240
          HSHRHRGASS  RDPVPLISSS  NSSSVWDTVC  LSARDVMAAY  GLSEQAGVTP  EAWAQLSPAL   300
          LQQQLSGACT  SQSRPPVQDQ  LSQSERYLYG  SLATLLICLC  AVFGLLLLTC  TGCRGVAHYI   360
          LQTFLSLAVG  ALTGDAVLHL  TPKVLGLHTH  SEEGLSPQPT  WRLLAMLAGL  YAFFLFENLF   420
          NLLLPRDPED  LEDGPCGHSS  HSHGGHSHGV  SLQLAPSELR  QPKPPHEGSR  ADLVAEESPE   480
          LLNPEPRRLS  PELRLLPYMI  TLGDAVHNFA  DGLAVGAAFA  SSWKTGLATS  LAVFCHELPH   540
          ELGDFAALLH  AGLSVRQALL  LNLASALTAF  AGLYVALAVG  VSEESEAWIL  AVATGLFLYV   600
          ALCDMLPAML  KVRDPRPWLL  FLLHNVGLLG  GWTVLLLLSL  YEDDITF                  648
```

Seq ID NO: C390 Protein Sequence
Protein Accession #: NP_061844

```
          1           11          21          31          41          51
          |           |           |           |           |           |
          MANASEPGGS  GGGEAAALGL  KLATLSLLLC  VSLAGNVLFA  LLIVRERSLH  RAPYYLLLDL   60
          CLADGLRALA  CLPAVMLAAR  RAAAAAGAPP  GALGCKLLAF  LAALFCFHAA  FLLLGVGVTR   120
          YLAIAHHRFY  AERLAGWPCA  AMLVCAAWAL  ALAAAFPPVL  DGGGDDEDAP  CALEQRPDGA   180
          PGALGFLLLL  AVVVGATHLV  YLRLLFFIHD  RRKMRPARLV  PAVSHDWTFH  GPGATGQAAA   240
          NWTAGFGRGP  TPPALVGIRP  AGPGRGARRL  LVLEEFKTEK  RLCKMFYAVT  LLFLLLWGPY   300
          VVASYLRVLV  RPGAVPQAYL  TASVWLTFAQ  AGINPVVCFL  FNRELRDCFR  AQPPCCQSPR   360
          TTQATHPCDL  KGIGL                                                       375
```

Seq ID NO: C391 Protein Sequence
Protein Accession #: NP_005622

```
          1           11          21          31          41    :     51
          |           |           |           |           |           |
          MAAARPARGP  ELPLLGLLLL  LLLGDPGRGA  ASSGNATGPG  PRSAGGSARR  SAAVTGPPPP   60
          LSHCGRAAPC  EPLRYNVCLG  SVLPYGATST  LLAGDSDSQE  EAHGKLVLWS  GLRNAPRCWA   120
          VIQPLLCAVY  MPKCENDRVE  LPSRTLCQAT  RGPCAIVERE  RGWPDPLRCT  PDRFPEGCTN   180
          EVQNIKFNSS  GQCEVPLVRT  DNPKSWYEDV  EGCGIQCQNP  LFTEAEHQDM  HSYIAAFGAV   240
          TGLCTLFTLA  TFVADWRNSN  RYPAVILFYV  NACFFVGSIG  WLAQFMDGAR  REIVCRADGT   300
          MRLGEPTSNE  TLSCVIIPVI  VYYALMAGVV  WFVVLTYAWH  TSFKALGTTY  QPLSGKTSYF   360
          HLLTWSLPFV  LTVAILAVAQ  VDGDSVSGIC  FVGYKNYRYR  AGFVLAPIGL  VLIVGGYFLI   420
          RGVMTLFSIK  SNHPGLLSEK  AASKINETML  RLGIFGFLAP  GFVLITFSCH  FYDPFNQAEW   480
          ERSFRDYVLC  QANVTIGLPT  KQPIPDCEIK  NRPSLLVEKI  NLFAMFGTGI  AMSTWVWTKA   540
          TLLIWRRTWC  RLTGQSDDEP  KRIKKSKMIA  KAPSKRHELL  QNPGQELSFS  MHTVSHDGPV   600
          AGLAFDLNEP  SADVSSAWAQ  HVTKMVARRG  AILPQDISVT  PVATPVPPEE  QANLWLVEAE   660
          ISPELQKRLG  RKKKRRKRKK  EVCPLAPPPE  LHPPAPAPST  IPRLPQLPRQ  KCLVAAGAWG   720
          AGDSCRQGAW  TLVSNPFCPE  PSPPQDPFLP  SAPAPVAWAH  GRRQGLGPIH  SRTNLMDTEL   780
          MDADSDF                                                                 788
```

Seq ID NO: C392 Protein Sequence
Protein Accession #: BAC04382

```
          1           11          21          31          41          51
          |           |           |           |           |           |
          MGARSGARGA  LLLALLLCWD  PRLSQAGRKR  SGEVLPDSFP  SAPAEPLPYF  LQEPQDAYIV   60
          KNKPVELRCR  AFPATQIYFK  CNGEWVSQND  HVTQEGLDEA  TLGARGGLRV  REVQIEVSRQ   120
          QVEELFGLED  YWCQCVAWSS  AGTTKSRRAY  VRIAYLRKNF  DQEPLGKEVP  LDHEVLLQCR   180
          PPEGVPVAEV  EWLKNEDVID  PTQDTNFLLT  IDHNLIIRQA  RLSDTANYTC  VAKNIVAKRR   240
          STTATVIVYV  NGGWSSWAEW  SPCSNRCGRG  WQKRTRTCTN  PAPLNGGAFC  EGQAFQKTAC   300
          TTICPVDGAW  TEWSKWSACS  TECAHWRSRE  CMAPPPQNGG  RDCSGTLLDS  KNCTDGLCMQ   360
          NKKTLSDPNS  HLLEASGDAA  LYAGLVVAIF  VVVAILMAVG  VVVYRRNCRD  FDTDITDSSA   420
          ALTGGFHPVN  FKTARPSNPQ  LLHPSVPPDL  TASAGIYRGP  VYALQDSTDK  IPMTNSPLLD   480
          PLPSLKVEVY  SSSTTGSSGPG  LADGADLLGV  LPPGTYPSDF  ARDTHFLHLR  SASLGSQQLL   540
          GLPRDPGSSV  SGTFGCLGGR  LSIPGTGVSL  LVPNGAIPQG  KFYEMYLLIN  KAESTLPLSE   600
          GTQTVLSPSV  TCGPTGLLLC  RPVILTMPHC  AEVSARDWIF  QLKTQAHQGH  WEEVVTLDEE   660
          TLNTPCYCQL  EPRACHILLD  QLGTYVFTGE  SYSRSAVKRL  QLAVFAPALC  TSLEYSLRVY   720
          CLEDTPVALK  EVLELERTLG  GYLVEEPKPL  MPKDSYHNLR  LSLHDLPHAH  WRSKLLAKYQ   780
          EIPPYHIWSG  SQKALHCTFT  LERHSLASTE  LTCKICVRQV  EGEGQIFQLH  TTLAETPAGS   840
          LDTLCSAPGS  TVTTQLGPYA  FKIPLSIRQK  ICNSLDAPNS  RGNDWRMLAQ  KLSMDRYLNY   900
          FATKASPTGV  ILDLWEALQQ  DDGDLNSLAS  ALEEMGKSEM  LVAVATDGDC              950
```

1372

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Seq ID NO: C393 Protein Sequence
Protein Accession #: NP_004616

1          11         21         31         41         51
|          |          |          |          |          |
MNRKARRCLG HLFLSLGMVY LRIGGFSSVV ALGASIICNK IPGLAPRQRA ICQSRPDAII   60
VIGEGSQMGL DECQFQFRNG RWNCSALGER TVFGKELKVG SREAAFTYAI IAAGVAHAIT  120
AACTQGNLSD CGCDKEKQGQ YHRDEGWKWG GCSADIRYGI GFAKVFVDAR EIKQNARTLM  180
NLHNNEAGRK ILEENMKLEC KCHGVSGSCT TKTCWTTLPQ FRELGYVLKD KYNEAVHVEP  240
VRASRNKRPT PLKIKKPLSY RKPMDTDLVY IEKSPNYCEE DPVTGSVGTQ GRACNKTAPQ  300
ASGCDLMCCG RGYNTHQYAR VWQCNCKFHW CCYVKCNTCS ERTEMYTCK              349
```

```
Seq ID NO: C394 Protein Sequence
Protein Accession #: NP_003777

1          11         21         31         41         51
|          |          |          |          |          |
MDALCGSGEL GSKFWDSNLS VHTENPDLTP CFQNSLLAWV PCIYLWVALP CYLLYLRHHC   60
RGYIILSHLS KLKMVLGVLL WCVSWADLFY SFHGLVHGRA PAPVFFVTPL VVGVTMLLAT  120
LLIQYERLQG VQSSGVLIIF WFLCVVCAIV PFFRSKILLAK AEGEISDPFR FTTFYIHFAL  180
VLSALILACF REKPPFFSAK NVDPNPYPET SAGFLSRLPF WWFTKMAIYG YRHPLEEKDL  240
WSLKEEDRSQ MVVQQLLEAW RKQEKQTARH KASAAPGKNA SGEDEVLLGA RPRPRKPSFL  300
KALLATFGSS PLISACFKLI QDLLSFINPQ LLSILIRFIS NPMAPSWWGF LVAGLMFLCS  360
MMQSLILQHY YHYIFVTGVK FRTGIMGVIY RKALVITNSV KRASTVGEIV NLMSVDAQRF  420
MDLAPFLNLL WSAPLQIILA IYFLWQNLGP SVLAGVAFMV LLIPLNGAVA VKMRAFQVKQ  480
MKLKDSRIKL MSEILNGIKV LKLYAWEPSF LKQVEGIRQG ELQLLRTAAY LHTTTTFTWM  540
CSPFLVTLIT LWVYVYVDPN NVLDAEKAFV SVSLFNILRL PLNMLPQLIS NLTQASVSLK  600
RIQQFLSQEE LDPQSVERKT ISPGYAITIH SGTFTWAQDL PPTLHSLDIQ VPKGALVAVV  660
GPVGCGKSSL VSALLGEMEK LEGKVHMKGS VAYVPQQAWI QNCTLQENVL FGKALNPKRY  720
QQTLEACALL ADLEMLPGGD QTEIGEKGIN LSGGQRQRVS LARAVYSDAD IFLLDDPLSA  780
VDSHVAKHIF DHVIGPEGVL AGKTRVLVTH GISFLPQTDP IIVLADGQVS EMGPYPALLQ  840
RNGSFANFLC NYAPDEDQGH LEDSWTALEG AEDKEALLIE DTLSNHTDLT DNDPVTYVVQ  900
KQFMRQLSAL SSDGEGQGRP VPRRHLGPSE KVQVTEAKAD GALTQEEKAA IGTVELSVFW  960
DYAKAVGLCT TLAICLLYVG QSAAAIGANV WLSAWTNDAM ADSRQNNTSL RLGVYAALGI 1020
LQGFLVMLAA MAMAAGGIQA ARVLHQALLH NKIRSPQSFF DTTPSGRILN CFSKDIYVVD 1080
EVLAPVILML LNSPFNAIST LVVIMASTPL PTVVILPLAV LYTLVQRFYA ATSRQLKRLE 1140
SVSRSPIYSH FSETVTGASV IRAYNRSRDF EIISDTKVDA NQRSCYPYII SNRWLSIGVE 1200
FVGNCVVLFA ALFAVIGRSS LNPGLVGLSV SYSLQVTFAL NWMIRMMSDL ESNIVAVERV 1260
KEYSKTETEA PWVVEGSRPP EGWPPRGEVE FRNYSVRYRP GLDLVLRDLS LHVHGGEKVG 1320
IVGRTGAGKS SMTLCLFRIL EAAKGEIRID GLNVADIGLH DLRSQLTIIP QDPILFSGTL 1380
RMNLDPFGSY SEEDIWWALE LSHLHTFVSS QPAGLDFQCS EGGENLSVGQ RQLVCLARAL 1440
LRKSRILVLD EATAAIDLET DNLIQATIRT QFDTCTVLTI AHRLNTIMDY TRVLVLDKGV 1500
VAEFDSPANL IAARGIFYGM ARDAGLA                                     1527
```

```
Seq ID NO: C395 Protein Sequence
Protein Accession #: NP_004617

1          11         21         31         41         51
|          |          |          |          |          |
MRARPQVCEA LLFALALQTG VCYGIKWLAL SKTPSALALN QTQHCKQLEG LVSAQVQLCR   60
SNLELMHTVV HAAREVMKAC RRAPADMRWN CSSIELAPNY LLDLERGTRE SAFVYALSAA  120
AISHAIARAC TSGDLPGCSC GPVPGEPPGP GNRWGGCADN LSYGLLMGAK FSDAPMKVKK  180
TGSQANKLMR LHNSEVGRQA LRASLEMKCK CHGVSGSCSI RTCWKGLQEL QDVAADLKTR  240
YLSATKVVHR PMGTRKHLVP KDLDIRPVKD SELVYLQSSP DFCMKNEKVG SHGTQDRQCN  300
KTSNGSDSCD LMCCGRGYNP YTDRVVERCH CKYHWCCYVT CRRCERTVER YVCK        354
```

```
Seq ID NO: C396 Protein Sequence
Protein Accession #: NP_114072

1          11         21         31         41         51
|          |          |          |          |          |
MEWGYLLEVT SLLAALALLQ RSSGAAAASA KELACQEITV PLCKGIGYNY TYMPNQFNHD   60
TQDEAGLEVH QFWPLVEIQC SPDLKPFLCS MYTPICLEDY KKPLPPCRSV CERAKAGCAP  120
LWRQYGFAWP DRMRCDRLPE QGNPDTLCMD YNRTDLTTAA PSPPRRLPPP PPGEQPPSGS  180
GHGRPPGARP PHRGGGRGGG GGDAAAPPAR GGGGGGKARP PGGGAAPCEP GCQCRAPMVS  240
VSSERHPLYN RVKTGQIANC ALPCHNPFFS QDERAFTVFW IGLWSVLCFV STPATVSTFL  300
IDMERFKYPE RPIIFLSACY LFVSVGYLVR LVAGHEKVAC SGGAPGAGGA GGAGGAAAGA  360
GAAGAGAGGP GGRGEYEELG AVEQHVRYET TGPALCTVVF LLVYFFGMAS SIWWVILSLT  420
WFLAAGMKWG NEAIAGYSQY FHLAAWLVPS VKSIAVLALS SVDGDPVAGI CYVGNQSLDN  480
LRGFVLAPLV IYLFIGTMFL LAGFVSLFRI RSVIKQQDGP TKTHKLEKLM IRLGLFTVLY  540
TVPAAVVVAC LFYEQHNRPR WEATHNCPCL RDLQPDQARR PDYAVFMLKY FMCLVVGITS  600
GVWVWSGKTL ESWRSLCTRC CWASKGAAVG GGAGATAAGG GGGPGGGGGG GPGGGGGPGG  660
GGGSLYSDVS TGLTWRSGTA SSVSYPKQMP LSQV                             694
```

```
Seq ID NO: C397 Protein Sequence
Protein Accession #: XP_050625

1          11         21         31         41         51
|          |          |          |          |          |
MLQGPGSLLL LFLASHCCLG SARGLFLFGQ PDFSYKRSNC KPIPANLQLC HGIEYQNMRL   60
PNLLGHETMK EVLEQAGAWI PLVMKQCHPD TKKFLCSLFA PVCLDDLDET IQPCHSLCVQ  120
VKDRCAPVMS APGFPWPDML ECDRFPQDND LCIPLASSDH LLPATEEAPK VCEACKNKND  180
DDNDIMETLC KNDFALKIKV KEITYINRDT KIILETKSKT IYKLNGVSER DLKKSVLWLK  240
```

1373

```
DSLQCTCEEM NDINAPYLVM GQKQGGELVI TSVKRWQKGQ REFKRISRSI RKLQC        295
```

Seq ID NO: C398 Protein Sequence
Protein Accession #: NP_001297.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MSMGLEITGT ALAVLGWLGT IVCCALPMWR VSAPIGSNII TSQNIWEGLW MNCVVQSTGQ     60
MQCKVYDSLL ALPQDLQAAR ALIVVAILLA AFGLLVALVG AQCTNCVQDD TAKAKITIVA   120
GVLFLLAALL TLVPVSWSAN TIIRDFYNPV VPEAQKREMG AGLYVGWAAA ALQLLGGALL   180
CCSCPPREKK YTATKVVYSA PRSTGPGASL GTGYDRKDYV                          220
```

Seq ID NO: C399 Protein Sequence
Protein Accession #: NP_036581.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MESRKDITNQ EELWKMKPRR NLEEDDYLHK DTGETSMLKR PVLLHLHQTA HADEFDCPSE     60
LQHTQELFPQ WHLPIKIAAI IASLTFLYTL LREVIHPLAT SHQQYFYKIP ILVINKVLPM   120
VSITLLALVY LPGVIAAIVQ LHNGTKYKKF PHWLDKWMLT RKQFGLLSPF FAVLHAIYSL   180
SYPMRRSYRY KLLNWAYQQV QQNKEDAWIE HDVWRMEIYV SLGIVGLAIL ALLAVTSIPS   240
VSDSLTWREF HYIQSKLGIV SLLLGTIHAL IFAWNKWIDI KQFVWYTPPT FMIAVFLPIV   300
VLIFKSILFL PCLRKKILKI RHGWEDVTKI NKTEICSQL                          339
```

Seq ID NO: C400 Protein Sequence
Protein Accession #: NP_001766.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MANCEFSPVS GDKPCCRLSR RAQLCLGVSI LVLILVVVLA VVVPRWRQTW SGPGTTKRFP     60
ETVLARCVKY TEIHPEMRHV DCQSVWDAFK GAPISKHPCN ITEEDYQPLM KLGTQTVPCN   120
KILLWSRIKD LAHQFTQVQR DMPTLEDTLL GYLADDLTWC GEFNTSKINY QSCPDWRKDC   180
SNNPVSVFWK TVSRRFAEAA CDVVHVMLNG SRSKIFDKNS TFGSVEVHNL QPEKVQTLEA   240
WVIHGGREDS RDLCQDPTIK ELESIISKRN IQFSCKNIYR PDKFLQCVKN PEDSSCTSEI   300
```

Seq ID NO: C401 Protein Sequence
Protein Accession #: XP_120513.2

```
1          11         21         31         41         51
|          |          |          |          |          |
MVSCTFSGPL RETNENVKKF YALRAFMFRM SSEAAMLGES RTPKPRKHRA TTRAKIFKRF     60
FSEGSESNSR LVEELAVIHT YSDDPAPTTS PSSVQPREFG VMQGAPRARF GSRTPPAAAE   120
ASSPHLGIGE AACQSGARAA APRAGARRCQ PQRQAAAAAA TAQTHTLPHA RTRADPAGRR   180
RRHPRSPAPG GEGTCSEGPA PRRRMEEEMQ PAEEGPSVPK IYKQRSPYSV LKTFPSKRPA   240
LAKRYERPTL VELPHGHLRT PAQPPPASPA ASSSSSFAAV VRLGAPPRPP RRGFRARGTI   300
PPLLPAPGVA GTLLPPPTSS SPPSPRPRPW HAAAPRGGTS HTHMWRSQST LPGSDTMVSV   360
FGLMAQRRWQ HRSLKQFEWG ILGSWGTWPC GQDWLEKEGQ VAVLLPRSEG NTAPKKSRMI   420
LDAFAQQCSR VLSLLNCGGK LLDSNHSQSM ISCVKQEGSS YNERQEHCHI GKGVHSQTSD   480
NVDIEMQYMQ RKQQTSAFLR VFTDSLQNYL LSGSFPTPNP SSASEYGHLA DVDPLSTSPV   540
HTLENISLDS TASLCKSRHL SREPPVKSDF PNPLQQALAG GASRPFSGAQ QSIAYRVNSE   600
LEDGIRSPVP LSCEALEMDL TSLGSKQLLN NYPVYITSKQ WDEAVNSSKK DGRRLLRYLI   660
RFVPTTDELK YSCGLGKRKR SVQSGETGPE RRPLDPVKVT CLRGTASFRS VSPSVISFHR   720
IGCGSPRTSV QPSVF                                                    735
```

Seq ID NO: C402 Protein Sequence
Protein Accession #: BAA92562.1

```
1          11         21         31         41         51
|          |          |          |          |          |
METTVLSGIN FEYKGMTGWE VAGDHIYTAA GASDNDFMIL TLVVPGPRPP QSVMADTENK     60
EVARITFVPE TLCSVNCELY FMVGVNSRTN TPVETWKGSK GKQSYTYIIE ENTTTSFTWA   120
FQRTTFHEAS RKYTNDVAKI YSINVTNVMN GVASYCRPCA LEASDVGSSC TSCPAGYYID   180
RDSGTCHSCP PNTILKAHQP YGVQACVPCG PGTKNNKIHS LCYNDCTFSR NTPTRTFNYN   240
FSALANTVTL AGGPSPTSKG LKYFHHFTLS LCGNQGRKMS VCTDNVTDLR IPEGESGFSK   300
SITAYVCQAV IIPPEVTGYK AGVSSQPVSL ADRLIGVTTD MTLDGITSPA ELFHLESLGI   360
PDVIFFYRSN DVTQSCSSGR STTIRVRCSP QKTVPGSLLL PGTCSDGTCD GCNFHPLWES   420
AAACPLCSVA DYHAIVSSCV AGIQKTTYVW REPKLCSGGI SLPEQRVTIC KTIDFWLKVG   480
ISAGTCTAIL LTVLTCYFWK KNQKLEYKYS KLVMNATLKD CDLPAADSCA IMEGEDVEDD   540
LIFTSKKSLF GKIKSFTSKQ PAPVTISLSE DS                                 572
```

Seq ID NO: C403 Protein Sequence
Protein Accession #: NP_055139.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MALQGISVVE LSGLAPGRXC AMVLADFGAR VVRVDRPGSR YDVSRLGRGK RSLVLDLKQP     60
REPRAAASVQ AVGCAAGALP PRCHGETPAG PRDSAAGKSK AYLCQAEWIW PVQESFCRLA   120
GHDINYLALS GVLSKIGRSG ENPYAPLNLV ADFAGGGLMC ALGIIMALFD RTRTDKGQVI   180
DANMVEGTAY LSSFLWKTQK SSLWEAPRGQ NMLDGGAPFY TTYRTADGBF MAVGAIEPQP   240
YELLIKGLGL KSDELPNQMS TDDWPEMKKK FADVFAKKTK AEWCQIFDGT DACVTPVLTF   300
EEVVHHDHNK ERGSFITSEE QDVSPRLAPL LLNTPAIPSS KGDPFIGEHT EEILEEFGFS   360
REEIYQLNSD KIIESNKVKA SL                                            382
```

Seq ID NO: C404 Protein Sequence

1374

Protein Accession #: XP_091332.1

```
     1         11         21         31         41         51
     |          |          |          |          |          |
5    MQRWTLWAAA FLTLHSAQAF PQTDISISPA LPELPLPSLC PLFWMEFKGH CYRFFPLNKT    60
     WAEADLYCSE FSVGRKSAKL ASIHSWEENV FVYDLVNSCV PGIPADVWTG LHDHRQEGQF   120
     EWTDGSSYDY SYWDGSQPDD GVHADPEEED CVQIWYRPTS EQLQAPEPQL PLSISEATDV   180
     YLPEDFPAEP KLMDQSWVSR KSLKPSKSHL MEPPTPVAKH QKAKTRHRSL RGVWWPSGKA   240
10   GSWKERMNAD YGRRKRSAPR QEGRLRCRER RLRAASGQGR PEGQRKQRQQ ERQERGWEEL   300
     GGVSPMRGAQ AWQHGLGAGS QRGAAPECGE NHQAPELGST WRGQRLQPQT AALCHFALRK   360
     LPGNAHGLAA AFVQPALQVQ EEKNNRTRFS GAYPTMSDPT CDQDSKEQSL RRHGREAEKD   420
     GPYRLVKKKR GPVACPSSFE LQSGGEVCLD PPVELRAGTW IAREPP                  466
```

Seq ID NO: C405 Protein Sequence
Protein Accession #: XP_054869.2

```
     1         11         21         31         41         51
     |          |          |          |          |          |
20   MHTCCPPVTL EQDLHRKMHS WMLQTLAFAV TSLVLSCAET IDYYGEICDN ACPCEEKDGI    60
     LTVSCENRGI ISLSEISPPR FPIYHLLLSG NLLNRLYPNE FVNYTGASIL HLGSNVIQDI   120
     ETGAFHGLRG LRRLHLNNNK LELLRDDTFL GLENLEYLQV DYNYISVIEP NAFGKLHLLQ   180
     VLILNDNLLS SLPNNLFRFV PLTHLDLRGN RLKLLPYVGL LQHMDKVVEL QLEENPWNCS   240
     CELISLKDWL DSISYSALVG DVVCETPFRL HGRDLDEVSK QELCPRRLIS DYEMRPQTPL   300
     STTGYLHTTP ASVNSVATSS SAVYKPPLKP PKGTRQPNKP RVRPTSRQPS KDLGYSNYGP   360
25   SIAYQTKSPV PLECPTACSC NLQISDLGLN VNCQERKIES IAELQPKPYN PKKMYLTENY   420
     IAVVRRTDPL EATGLDLLHL GNNRISMIQD RAFGDLTNLR RLYLNGNRIE RLSPELFYGL   480
     QSLQYLFLQY NLIREIQSGT FDPVPNLQLL FLNNNLLQAM PSGVFSGLTL LRLNLRSNHF   540
     TSLPVSGVLD QLKSLIQIDL HDNPWDCTCD IVGMKLWVEQ LKVGVLVDEV ICKAPKKFAE   600
30   TDMRSIKSEL LCPDYSDVVV STPTPSSIQV PARTSAVTPA VRLNSTGAPA SLGAGGGASS   660
     VPLSVLILSL LLVFIMSVFV AAGLFVLVMK RRKKNQSDHT STNNSDVSSF NMQYSVYGGG  .720
     GGTGGHPHAH VHHRGPALPK VKTPAGHVYE YIPHPLGHMC KNPIYRSREG NSVEDYKDLH   780
     ELKVTYSSNH HLQQQQQPPP PPQQPQQQPP PQLQLQPGEE ERRESHHLRS PAYSVSTIEP   840
     REDLLSPVQD ADRFYRGILE PDKHCSTTPA GNSLPEYPKP PCSPAAYTFS PNYDLRRPHQ   900
35   YLHPGAGDSR LREPVLYSPP SAVFVEPNRN EYLELKAKLN VEPDYLEVLE KQTTFSQF     958
```

Seq ID NO: C406 Protein Sequence
Protein Accession #: NP_000784.2

```
     1         11         21         31         41         51
     |          |          |          |          |          |
40   MGILSVDLLI TLQILPVFFS NCLFLALYDS VILLKHVVLL LSRSKSTRGE WRRMLTSEGL   .60
     RCVWKSFLLD AYKQVKLGED APNSSVVHVS STEGGDNSGN GTQEKIAEGA TCHLLDFASP   120
     ERPLVVNFGS ATUPPFTSQL PAFRKLVEEF SSVADFLLVY IDEAHPSDGW AIPGDSSLSF   180
     EVKKHQNQED RCAAAQQLLE RFSLPPQCRV VADRMDNNAN IAYGVAPERV CIVQRQKIAY   240
45   LGGKGPFSYN LQEVRHWLEK NFSKRUKKTR LAG                                273
```

Seq ID NO: C407 Protein Sequence
Protein Accession #: NP_006540.2

```
     1         11         21         31         41         51
     |          |          |          |          |          |
50   MSSCVSSQPS SNRAAPQDEL GGRGSSSSES QKPCEALRGL SSLSIHLGME SFIVVTECEP    60
     GCAVDLGLAR DRPLEADGQE VPLDSSGSQA RPHLSGRKLS LQERSQGGLA AGGSLDMNGR   120
     CICPSLPYSP VSSPQSSPRL PRRPTVESHH VSITGMQDCV QLNQYTLKDB IGKGSYGVVK   180
     LAYNENDNTY YAMKVLSKKK LIRQAGFPRR PPPRGTRPAP GGCIQPRGPI EQVYQEIAIL  ·240
55   KKLDHPNVVK LVEVLDDPNE DHLYMVFELV NQGPVMEVPT LKPLSEDQAR FYFQDLIKGI   300
     EYLHYQKIIH RDIKPSNLLV GEDGHIKIAD PGVSNEPKGS DALLSNTVGT PAFMAPESLS   360
     ETRKIFSGKA LDVWAMGVTL YCPVFGQCPP MDERIMCLHS KIKSQALEPP DQPDIAEDLK   420
     DLITRMLDKN PESRIVVPEI KLHPWVTRHG AEPLPSEDEN CTLVEVTEEE VENSVKHIPS   480
     LATVILVKTM IRKRSFGNPF EGSRREERSL SAPGNLLTKK PTRECESLSE LKEARQRRQP   540
60   PGHRPAPRGG GGSALVRGSP CVESCWAPAP GSPARMHPLR PEEAMEPE                 588
```

Seq ID NO: C408 Protein Sequence
Protein Accession #: NP_061116.2

```
   .·1         11         21         31         41         51
     |          |          |          |          |          |
65   MGLSLPKEKG LILCLWSKFC RWFQRRESWA QSRDEQNLLQ QKRIWESPLL LAAKDNDVQA    60
     LNKLLKYEDC KVHQRGAMGE TALHIAALYD NLEAAMVLME AAPELVFEPM TSELYEGQTA   120
70   LHIAVVNQNM NLVRALLARR ASVSARATGT AFRRSPCNLI YFGEHPLSFA ACVNSEEIVR   180
     LLIEHGADIR AQDSLGNTVL HILILQPNKT FACQMYNLLL SYDRHGDHLQ PLDLVPNHQG   240
     LTPPKLAGVE GNTVMFQHLM QKRKHTQWTY GPLTSTLYDL TEIDSSGDEQ SLLELIITTK   300
     KREARQILDQ TPVKELVSLK WKRYGRPYFC MLGAIYLLYI ICFTMCCIYR PLKPRTNNRT   360
     SPRDNTLLQQ KLLQEAYMTP KDDIRLVGEL VTVIGAIIIL LVEVPDIFRM GVTRPFGQTI   420
75   LGGPFHVLII TYAFMVLVTM VMRLISASGE VVPMSFALVL GWCNVMYPAR GFQMLGPFTI   480
     MIQKMIFGDL MRFCWLMAVV ILGFASAFYI IFQTEDPEEL GHFYDYPMAL PSTFELFLTI   540
     IDGPANYNVD LPFMYSITYA APAIIATLLM LNLLIAMMGD THWRVAHERD ELWRAQIVAT   600
     TVMLERKLPR CLWPRSGICG REYGLGDRWP LRVEDRQDLN RQRIQRYAQA FHTRGSEDLD   660
     KDSVEKLELG CPFSPHLSLP MPSVSRSTSR SSANWERLRQ GTLRRDLRGI INRGLEDGES   720
80   WEYQI                                                               725
```

Seq ID NO: C409 Protein Sequence
Protein Accession #: NP_068710.1

```
      1         11        21        31        41        51
      |         |         |         |         |         |
      MQKVTLGLLV FLAGFPVLDA NDLEDKNSPF YYDWHSLQVG GLICAGVLCA MGIIIVMSEW   60
      RSSGEQAGRG WGSPPLTTQL SPTGAKCKCK FGQKSGHHPG ETPPLITPGS AQS          113

      Seq ID NO: C410 Protein Sequence
      Protein Accession #: NP_005962.1


      1         11        21        31        41        51
      |         |         |         |         |         |
      MQKVTLGLLV FLAGFPVLDA NDLEDKNSPF YYDWHSLQVG GLICAGVLCA MGIIIVMSAK   60
      CKCKFGQKSG HHPGETPPLI TPGSAQS                                       87

      Seq ID NO: C411 Protein Sequence
      Protein Accession #: NP_004952.1


      1         11        21        31        41        51
      |         |         |         |         |         |
      MLSKVLPVLL GILLILQSRV EGPQTESKNE ASSRDVVYGP QPQPLENQLL SEETKSTETE   60
      TGSRVGKLPE ASRILNTILS NYDHKLRPGI GEKPTVVTVE IAVNSLGPLS ILDMEYTIDI   120
      IPSQTWYDER LCYNDTFBSL VLNGNVVSQL WIPDTFPRNS KRTHEHEITM PNQMVRIYKD   180
      GKVLYTIRMT IDAGCSLHML RFPMDSHSCP LSFSSFSYPE NEMIYKWENF KLEINEKNSW   240
      KLFQFDFTGV SNKTEIITTP VGDFMVMTIP FNVSRRFGYV AFQNYVPSSV TTMLSWVSFW   300
      IKTESAPART SLGITSVLTM TTLGTFSRKN PPRVSYITAL DFYIAICFVF CFCALLEFAV   360
      LNFLIYNQTK AHASPKLRHP RINSRAHART RARSRACARQ HQEAFVCQIV TTEGSDGEER   420
      PSCSAQQPPS PGSPEGPRSL CSKLACCEWC KRFKKYFCMV PDCEGSTWQQ GRLCIHVYRL   480
      DNYSRVVFFV TFFPFNVLYW LVCLNL                                        506

      Seq ID NO: C412 Protein Sequence
      Protein Accession #: NP_068819.1


      1         11        21        31        41        51
      |         |         |         |         |         |
      MEYTIDIIFS QTWYDERLCY NDTFESLVLN GNVVSQLWIP DTFPRNSKRT HEHEITMPNQ   60
      MVRIYKDGKV LYTIRMTIDA GCSLHMLRFP MDSHSCPLSF SSFSYPENEM IYKWENFKLE   120
      INEKNSWKLF QLDFTGVSNK TEIITTPVGD FMVMTIFFNV SRRFGYVAFQ NYVPSSVTTM   180
      LSWVSFWIKT ESAPARTSLG ITSVLTMTTL GTPSRKNFPR VSYITALDFY IAICFVFCFC   240
      ALLEFAVLNF LIYNQTKAHA SPKLRHPRIN SRAHARTRAR SRACARQHQE AFVCQIVTTE   300
      GSDGEERPSC SAQQPPSPGS PEGPRSLCSK LACCEWCKRF KKYFCMVPDC EGSTWQQARL   360
      CIHVYRLDNY SRVVFPVTFF PFNVLYWLVC LNL                                393

      Seq ID NO: C413 Protein Sequence
      Protein Accession #: NP_068822.1


      1         11        21        31        41        51
      |         |         |         |         |         |
      MEYTIDIIFS QTWNSKRTHE HEITMPNQMV RIYKDGKVLY TIRMTIDAGC SLHMLRPPMD   60
      SHSCPLSPSS FSYPENEMIY KWENFKLEIN EKNSWKLFQF DFTGVSNKTE IITTPVGDFM   120
      VMTIFFNVSR RFGYVAFQNY VPSSVTTMLS WVSFWIKTES APARTSLGIT SVLTMTTLGT   180
      FSRKNFPRVS YITALDFYIA ICFVFCFCAL LEFAVLNFLI YNQTKAHASP KLRHPRINSR   240
      AHARTRARSR ACARQHQEAF VCQIVTTEGS DGEERPSCSA QQPPSPGSPE GPRSLCSKLA   300
      CCEWCKRFKK YFCMVPDCEG STWQQGRLCI HVYRLDNYSR VVFPVTFFFF NVLYWLVCLN   360
      L                                                                   361

      Seq ID NO: C414 Protein Sequence
      Protein Accession #: NP_068830.1


      1         11        21        31        41        51
      |         |         |         |         |         |
      MEYTIDIIFS QTWYDERLCY NDTFESLVLN GNVVSQLWIP DTFPRNSKRT HEHEITMPNQ   60
      MVRIYKDGKV LYTIRMTIDA GCSLHMLRPP MDSHSCPLSF SSFSYPENEM IYKWENFKLE   120
      INEKNSWKLF QFDFTGVSNK TEIITTPVGD FMVMTIFFNV SRRFGYVAFQ NYVPSSVTTM   180
      LSWVSFWIKT ESAPARTSLG ITSVLTMTTL GTFSRKNFPR VSYITALDFY IAICFVFCFC   240
      ALLEFAVLNF LIYNQTKAHA SPKLRHPRIN SRAHARTRAR SRACARQHQE AFVCQIVTTE   300
      GSDGEERPSC SAQQPPSPGS PEGPRSLCSK LACCEWCKRF KKYFCMVPDC EGSTWQQGRL   360
      CIHVYRLDNY SRVVFPVTFF PFNVLYWLVC LNL                                393

      Seq ID NO: C415 Protein Sequence
      Protein Accession #: NP_068591.1


      1         11        21        31        41        51
      |         |         |         |         |         |
      MPAVSGPGPL FCLLLLLLDP HSPETGCPPL RRFEYKLSFK GPRLALPGAG IPFWSHHGDA   60
      ILGLEEVRLT PSMRNRSGAV WSRASVPFSA WEVEVQMRVT GLGRRGAHGM AVWYTRGRGH   120
      VGSVLGGLAS WDGIGIFFDS PAEDTQDSPA IRVLASDGHI PSEQPGDGAS QGLGSCHWDF   180
      RNRPHPFRAR ITYWGQRLRM SLNSGLTPSD PGEFCVDVGP LLLVPGGFFG VSAATGTLAD   240
      DHDVLSFLTF SLSEPSPEVP PQPFLEMQQL RLARQLEGLW ARLGLGTRED VTPKSDSEAQ   300
      GEGERLFDLE ETLGRHRRIL QALRGLSKQL AQAERQWKKQ LGPPGQARPD GGWALDASCQ   360
      IPSTPGRGGH LSMSLNKDSA KVGALLHGQW TLLQALQEMR DAAVRMAAEA QVSYLPVGIE   420
      HHFLELDHIL GLLQEELRGP AKAAAKAPRP PGQPPRASSC LQPGIFLFYL LIQTVGFFGY   480
      VHFRQELNKS LQECLSTGSL PLGPAPHTPR ALGILRRQPL PASMPA                  526

      Seq ID NO: C416 Protein Sequence
      Protein Accession #: XP_117036.1
```

1376

```
       1          11         21         31         41         51
       |          |          |          |          |          |
 5     MERRTRGALG SRRPPPPLPA LRHLCTGLQA AGMAWPGTLW RHTCQGRAXA AEGPWGLFRP    60
       HRCPREAGQA PVGPSPETQG VAHVCSRARV SVDEREPGGG AYAMHVTPRW KGCHRHSGRT   120
       VRGSVSWKRP EQAAPETGRG PAVARGSGDG NECGWG                             156
```

Seq ID NO: C417 Protein Sequence
Protein Accession #: XP_167803.2

10
```
       1          11         21         31         41         51
       |          |          |          |          |          |
       MPGKGQRKTA TNKPGGLPGA PGVGIGGHCL YVLECKCPIK NKTKTHHHKK KNFAAKRNEE    60
15     KLKKKKKQEK KNHTKFFHHT YPLSQQDFLF AKSYFCGNGP CFLWQGLF               108
```

Seq ID NO: C418 Protein Sequence
Protein Accession #: NP_079056.1

```
       1          11         21         31         41         51
20     |          |          |          |          |          |
       MFRLVERYEM PRHEVYVLLI RNIFLKISII GILCYYWLNT VALSGEECWB TLIGQDIYRL    60
       LLMDFVFSLV NSFLGEFLRR IIGMQLITSL GLQEFDIARN VLELIYAQTL VWIGIFFCPL   120
       LPFIQMIMLF IMFYSKNISL MMNFQPPSKA WRASQMMTFF IFLLFFPSFT GVLCTLAITI   180
25     WRLKPSADCG PFRGLPLFIH SIYSWIDTLS TRPGYLWVVW IYRNLIGSVH FFFILTLIVL   240
       IITYLYWQIT EGRKIMIRLL HEQIINEGKD KMFLIEKLIK LQDMEKKANP SSLVLERREV   300
       EQQGFLHLGE HDGSLDLRSR RSVQEGNPRA                                    330
```

Seq ID NO: C419 Protein Sequence
Protein Accession #: Eos sequence

30
```
       1          11         21         31         41         51
       |          |          |          |          |          |
       MLSDDHVNEI IIQVENVSSG VQSHPSSNQI FQEKVLLDSS INMVLSISDI DVIDSQTVSK    60
       RNDQKGNQVL RFSTSLNESM SQTLHSLECM GIDTPGSSHB TVQGQKLIAS LIPMTSRDRI   120
35     KAIRNQPRTM EEKRNLRKIV DKEKSKQTHR ILQLNCCIQC LNSISRAYRR SKNSLSEILN   180
       SISLWQKTLK IIGGRFGTSV LSYFNFLRWL LKFNIFSPIL NFSPIIIPQF TVAKKNTLQF   240
       TGLEFFTGVG YFRDTVMYYG FYTNSTIQHG NSGASYNMQL AYIFTIGACL TTCFFSLLFS   300
       MAKYFRNNFI NPHIYSGGIT KLIFCWDFTV THEKAVKLKQ KNLSTEIREN LSELRQENSK   360
40     LTFNQLLTRF SAYMVAWVVS TGVAIACCAA VYYLAEYNLE FLKTHSNPGA VLLLLPFVVSC   420
       INLAVPCIYS MFRLVERYEM PRHEVYVLLI RNIFLKISII GILCYYWLNT VALSGEECWE   480
       TLIGQDIYRL LLMDFVFSLV NSFLGEFLRR IIGMQLITSL GLQEFDIARN VLELIYAQTL   540
       VWIGIFFCPL LPFIQMIMLF IMFYSKNISL MMNFQPPSKA WRASQMMTFF IFLLFFPSFT   600
       GVLCTLAITI WRLKPSADCG PFRGLPLFIH SIYSWIDTLS TRPGYLWVVW IYRNLIGSVH   660
       FFFILTLIVL IITYLYWQIT EGRKIMIRLL HEQIINEGKD KMFLIEKLIK LQDMEKKANP   720
45     SSLVLERREV EQQGFLHLGE HDGSLDLRSR RSVQEGNPRA                         760
```

Seq ID NO: C420 Protein Sequence
Protein Accession #: NP_002241.1

```
       1          11         21         31         41         51
50     |          |          |          |          |          |
       MGGDLVLGLG ALRRRKRLLE QEKSLAGWAL VLAGTGIGLM VLHAEMLWFG GCSWALYLFL    60
       VKCTISISTF LLLCLIVAFH AKEVQLFMTD NGLRDWRVAL TGRQAAQIVL ELVVCGLHPA   120
55     PVRGPPCVQD LGAPLTSPQP WPGFLGQGEA LLSLAMLLRL YLVPRAVLLR SGVLLNASYR   180
       SIGALNQVRP RHWFVAKLYM NTHPGRLLLG LTLGLWLTTA WVLSVAERQA VNATGHLSDT   240
       LWLIPITFLT IGYGDVVPGT MWGKIVCLCT GVMGVCCTAL LVAVVARKLE FNKAEKHVHN   300
       FMMDIQYTKE MKESAARVLQ EAWMFYKHTR RKESHAARRH QRKLLAAINA FRQVRLKHRK   360
       LREQVNSMVD ISKMHMILYD LQQNLSSSHR ALEKQIDTLA GKLDALTBLL STALGPRQLP   420
       BPSQQSK                                                            427
```

Seq ID NO: C421 Protein Sequence
Protein Accession #: NP_079533.1

```
       1          11         21         31         41         51
65     |          |          |          |          |          |
       MGGKQRDEDD EAYGKPVKYD PSFRGPIKNR SCTDVICCVL FLLFILGYIV VGIVAWLYGD    60
       PRQVLYPRNS TGAYCGMGEN KDKPYLLYFN IPSCILSSNI ISVAENGLQC PTPQVCVSSC   120
       PEDPWTVGKN EFSQTVGEVF YTKNRNFCLP GVPWNMTVIT SLQQELCPSF LLPSAPALGR   180
       CFPWTNITPP ALPGITNDTT IQQGISGLID SLNARDISVK IFEDFAQSWY WILVALGVAL   240
70     VLSLLPILLL RLVAGPLVLV LILGVLGVLA YGIYYCWBEY RVLRDKGASI SQLGFTTNLS   300
       AYQSVQETWL AALIVLAVLE AILLLVLIFL RQRIRIAIAL LKEASKAVGQ MMSTMFYPLV   360
       TFVLLLICIA YWAMTALYPL PTQPATLGYV LWASNISSPG CEKVPINTSC NPTAHLVNSS   420
       CPGLMCVFQG YSSKGLIQRS VFNLQIYGVL GLFWTLNWVL ALGQCVLAGA FASFYWAFHK   480
75     PQDIPTFPLI SAFIRTLRYH TGSLAFGALI LTLVQIARVI LEYIDHKLRG VQNPVARCIM   540
       CCFKCCLWCL EKFIKFLNRN AYIMIAIYGK NFCVSAKNAF MLLMRNIVRV VVLDKVTDLL   600
       LPFGKLLVVG GVGVLSFFFP SGRIPGLGKD FKSPHLNYYW LPIMTSILGA YVIASGFFSV   660
       FGMCVDTLFL CFLEDLERNN GSLDRPYYMS KSLLKILGKK NEAPPDNKKR KK           712
```

Seq ID NO: C422 Protein Sequence
Protein Accession #: NP_057264.1

```
80     1          11         21         31         41         51
       |          |          |          |          |          |
       MGSNSGQAGR HIYKSLADDG PFDSVEPPKR PTSRLIMHSM AMFGREFCYA VEAAYVTPVL    60
```

1377

```
      LSVGLPSSLY SIVWFLSPIL GFLLQPVVGS ASDHCRSRWG RRRPYILTLG VMMLVGMALY   120
      LNGATVVAAL IANPRRKLVN AISVTMIGVV LFDFAADFID GPIKAYLFDV CSHQDKEKGL   180
      HYHALFTGFG GALGYLLGAI DWAHLELGRL LGTEFQVMPP FSALVLTLCF TVHLCSISEA   240
      PLTEVAKGIP PQQTPQDPPL SSDGMYEYGS IEKVKNGYVN PELAMQGAKN KNHAEQTRRA   300
  5   MTLKSLLRAL VNMPPHYRYL CISHLIGWTA FLSNMLFFTD FMGQIVYRGD PYSAHNSTEF   360
      LIYERGVEVG CWGFCINSVF SSLYSYFQKV LVSYIGLKGL YFTGYLLFGL GTGPIGLFPN   420
      VYSTLVLCSL FGVMSSTLYT VPFNLITEYH REBEKERQQA PGGDPDNSVR GKGMDCATLT   480
      CMVQLAQILV GGGLGFLVNT AGTVVVVVIT ASAVALIGCC FVALFVRYVD            530
```

Seq ID NO: C423 Protein Sequence
Protein Accession #: NP_003264.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MEGFGGVGGR GTRGFAAKGV WRGRAEEGPV LGAAERGFMV STGSRRRVFE GPGGGGLRWT   60
      PGKGTGRQRG AWGPRAEDGV RRRTLGMPRG SRRDVRAPCG PAGSWGARGG RRRDGPSRRR   120
      RGSATAAARH HVPPAPGGPF GPRAPAGSTR VPARAGGAVE PTGAAAVARL ARPAGGALPT   180
      AGAQGAGPAR GRSGEGSEWA RRGKGRPGPY QSPLGPAVAE GQELKDKSRL RYPINGFQAL   240
      VLTALLVGLG MSAGLPLGAL PEMLLPLAFV ATLTAFIPSL FLYMKAQVAP VSALAPGGNS   300
 20   GNPIYDFFLG RELNPRICFF DFKYFCELRP GLIGWVLINL ALLMKEAELR GSPSLAMWLV   360
      NGFQLLYVGD ALWHEEAVLT TMDITHDGFG FMLAFGDMAW VPFTYSLQAQ FLLHHPQPLG   420
      LPMASVICLI NATGYYIFRG ANSQKNTFRK NPSDPRVAGL ETISTATGRK LLVSGWWGMV   480
      RHPNYLGDLI MALAWSLPCG VSHLLPYFYL LYFTALLVHR EARDERSACR STAWPGRSTA   540
      GVCLTASCPT STEAAPPPQV GHVPTHPPAH PGPGASTHLG LKGLHPTQP             589
```

Seq ID NO: C424 Protein Sequence
Protein Accession #: NP_056535.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MGRLLRAARL PPLLSPLLLL LVGGAFLGAC VAGSDEPGPE GLTSTSLLDL LLPTGLEPLD   60
      SEEPSETMGL GAGLGAPGSG FPSEENEESR ILQPPQYFWE EEEELNDSSL DLGPTADYVF   120
      PDLTEKAGSI EDTSQAQELP NLPSPLPKMN LVEPPWHMPP REEEEBEEEE EERKEEVEK   180
      QEEEEEEELL PVNGSQBEAK PQVRDFSLTS SSQTPGATKS RHEDSGDQAS SGVEVESSMG   240
 35   PSLLLPSVTP TTVTPGDQDS TSQEAEATVL PAAGLGVEFE APQEASEEAT AGAAGLSGQH   300
      EEVPALPSFP QTTAPSGAEH PDEDPLGSRT SASSPLAPGD MELTPSSATL GQEDLNQQLL   360
      EGQAAEAQSR IPWDSTQVIC KDWSNLAGKN YIILNMTENI DCEVFRQHRG PQLLALVEEV   420
      LPRHGSGHHG AWHISLSKPS EKEQHLLMTL VGEQGVVPTQ DVLSMLGDIR RSLEEIGIQN   480
      YSTTSSCQAR ASQVRSDYGT LFVVLVVVIGA ICIIIIALGL LYNCWQRRLP KLKHVSHGEE   540
      LRFVENGCHD NPTLDVASDS QSEMQEKHPS LNGGGALNGP GSWGALMGGK RDPEDSDVFE   600
      EDTHL                                                              605
```

Seq ID NO: C425 Protein Sequence
Protein Accession #: NP_001188.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MSEVRPLSRD ILMETLLYEQ LLEPPTMEVL GMTDSEEDLD PMEDFDSLEC MEGSDALALR   60
      LACIGDEMDV SLRAPRLAQL SEVAMHSLGL AFIYDQTEDI RDVLRSFMDG FTTLKENIMR   120
      PWRSPNPGSW VSCEQVLLAL LLLLALLLPL LSGGLHLLLK                        160
```

Seq ID NO: C426 Protein Sequence
Protein Accession #: AAP76225.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MATPLPPPSP RHLRLLRLLL SGLVLGAALR GAAAGHPDVA ACPGSLDCAL KRRARCPPGA   60
      HACGPCLQPP QEDQQGLCVP RMRRPPGGGR PQPRLEDEID FLAQELARKE SGQSTPPLPK   120
      DRQRLPEPAT LGFSARGQGL ELGLPSTPGT PTPTPHTSLG SPVSSDPVHM SPLEPRGGQG   180
      DGLALVLILA FCVAGAAALS VASLCWCRLQ REIRLTQKAD YATAKAPGSP AAPRISPGDQ   240
      RLAQSAEMYH YQHQRQQMLC LERHKEPPKE LDTASSDEEN EDGDFTVYEC PGLAPTGEME   300
      VRNPLFDHAA LSAPLPAPSS PPALP                                        325
```

Seq ID NO: C427 Protein Sequence
Protein Accession #: NP_004436.1

```
      1          11         21         31         41         51
      |          |          |          |          |          |
      MVCSLWVLLL VSSVLALEEV LLDTTGETSE IGWLTYPPGG WDEVSVLDDQ RRLTRTFEAC   60
      HVAGAPPGTG QDNWLQTHFV ERRGAQRAHI RLHFSVRACS SLGVSGGTCR ETFTLYYRQA   120
      EEPDSPDSVS SWHLKRWTKV DTIAADESFP SSSSSSSSSS SAAWAVGPHG AGQRAGLQLN   180
      VKERSFGPLT QRGFYVAFQD TGACLALVAV RLPSYTCPAV LRSFASFPET QASGAGGASL   240
      VAAVGTCVAH AEPEEDGVGG QAGGSPPRLH CNGEGKWMVA VGGCRCQPGY QPARGDKACQ   300
      ACPRGLYKSS AGNAPCSPCP ARSHAPNPAA PVCPCLEGFY RASSDPPEAP CTGPPSAPQE   360
      LWFEVQGSAL MLHWRLPREL GGRGDLLFNV VCKECEGRQE PASGGGGTCH RCRDEVHFDP   420
      RQRGLTESRV LVGGLRAHVP YILEVQAVNG VSELSPDPPQ AAAINVSTSH EVPSAVPVVH   480
      QVSRASNSIT VSWPQPDQTN GNILDYQLRY YDQAEDESHS FTLTSETNTA TVTQLSPGHI   540
      YGFQVRARTA AGHGPYGGKV YFQTLPQGEL SSQLPERLSL VIGSILGALA FLLLAAITVL   600
      AVVFQRKRRG TGYTEQLQQY SSPGLVKYYY IDPSTYEDPC QAIRELAREV DPAYIKIEEV   660
      IGTGSFGEVR QGRLQPRGRR EQTVAIQALW AGGAESLQMT FLGRAAVLGQ FQHPNILRLE   720
      GVVTKSRPLM VLTEFMELGP LDSFLRQREG QFSSLQLVAM QRGVAAAMQY LSSFAFVHRS   780
      LSAHSVLVNS HLVCKVARLG HSPQGPSCLL RWAAPEVIAH GKHTTSSDVW SFGILMWEVM   840
      SYGERPYWDM SEQEVLNAIE QEFRLPPPPG CPPGLHLLML DTWQKDRARR PHFDQLVAAF   900
      DKMIRKPDTL QAGGDPGERP SQALLTPVAL DFPCLDSPQA WLSAIGLECY QDNFSKFGLC   960
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TFSDVAQLSL EDLPALGITL AGHQKKLLHH IQLLQQHLRQ QGSVEV                    1006
```

Seq ID NO: C428 Protein Sequence
Protein Accession #: XP_043340.2

```
1          11         21         31         41         51
|          |          |          |          |          |
MPFDFRRRFDI YRKVPKDLTQ PTYTGAIISI CCCLFILFLF LSELTGFITT EVVNELYVDD    60
PDKDSGGKID VSLNISLPNL HCELVGLDIQ DEMGRHEVGH IDNSMKIPLN NGAGCRFEGQ    120
FSINKVPGNF HVSTHSATAQ PQNPDMTHVI HKLSFGDTLQ VQNIHGAFNA LGGADRLTSN    180
PLASHDYILK IVPTVYEDKS GKQRYSYQYT VANKEYVAYS HTGRIIPAIW FRYDLSPITV    240
KYTERRQPLY RPITTICAII GGTFTVAGIL DSCIFTASEA WKKIQLGKMH              290
```

Seq ID NO: C429 Protein Sequence
Protein Accession #: NP_002142.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MAQKEGGRTV PCCSRPKVAA LTAGTLLLLT AIGAASWAIV AVLLRSDQEP LYPVQVSSAD    60
ARLMVFDKTE GTWRLLCSSR SNARVAGLSC BEMGPLRALT HSELDVRTAG ANGTSGPFCV    120
DEGRLPHTQR LLEVISVCDC PRGRFLAAIC QDCGRRKLPV DRIVGGRDTS LGRWPWQVSL    180
RYDGAHLCGG SLLSGDWVLT AAHCFPERNR VLSRWRVFAG AVAQASPHGL QLGVQAVVYH    240
GGYLPFRDPN SEENSNDIAL VHLSSPLPLT EYIQPVCLPA AGQALVDGKI CTVTGWGNTQ    300
YYGQQAGVLQ EARVPIISND VCNGADFYGN QIKPKMFCAG YPEGGIDACQ GDSGGPFVCE    360
DSISRTPRWR LCGIVSWGTG CALAQKPGVY TKVSDFREWI FQAIKTHSEA SGMVTQL      417
```

Seq ID NO: C430 Protein Sequence
Protein Accession #: BAA92562.1

```
1          11         21         31         41         51
|          |          |          |          |          |
METTVLSGIN FEYKGMTGWE VAGDHIYTAA GASDNDPMIL TLVVPGFRPP QSVMADTENK    60
EVARITFVFE TLCSVNCELY FMVGVNSRTN TPVETWKGSK GKQSYTYIIE ENTTTSFTWA    120
FQRTTFHEAS RKYTNDVAKI YSINVTNVMN GVASYCRPCA LEASDVGSSC TSCPAGYYID    180
RDSGTCHSCP PNTILKAHQP YGVQACVPCG PGTKNNKIHS LCYNDCTFSR NTPTRTFNYN    240
FSALANTVTL AGGPSFTSKG LKYPHHFTLS LCGNQGRKMS VCTDNVTDLR IPEGESGFSK    300
SITAYVCQAV IIPPEVTGYK AGVSSQPVSL ADRLIGVTTD MTLDGITSPA ELFHLESLGI    360
PDVIFFYRSN DVTQSCSSGR STTIRVRCSP QKTVPGSLLL PGTCSDGTCD GCNFHPLWES    420
AAACPLCSVA DYHAIVSSCV AGIQKTTYVW REPKLCSGGI SLPEQRVTIC KTIDFWLKVG    480
ISAGTCTAIL LTVLTCYFWK KNQKLEYKYS KLVMNATLKD CDLPAADSCA IMEGEDVEDD    540
LIFTSKKSLF GKIKSFTSKQ PAPVTISLSE DS                                  572
```

Seq ID NO: C431 Protein Sequence
Protein Accession #: NP_004855.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MPGQELRTVN GSQMLLVLLV LSWLPHGGAL SLAEASRASF PGPSELHSED SRFRELRKRY    ·60
EDLLTRLRAN QSWEDSNTDL VPAPAVRILT PBVRLGSGGH LHLRISRAAL PEGLPEASRL    120
HRALFRLSPT ASRSWDVTRP LRRQLSLARP QAPALHLRLS PPPSQSDQLL AESSSARPQL    180
ELHLRPQAAR GRRRARARNG DDCPLGPGRC CRLHTVRASL EDLGWADWVL SPREVQVTMC    240
IGACPSQFRA ANMHAQIKTS LHRLKPDTBP APCCVPASYN PMVLIQKTDT GVSLQTYDDL    300
LAKDCHCI                                                            308
```

Seq ID NO: C433 Protein Sequence
Protein Accession #: NP_443090.1

```
1          11         21         31         41         51
|          |          |          |          |          |
MEDPSGAREP RARPRERDPG RRPHPDQGRT HDRPRDRPGD PRRKRSSDGN RRRDGDRDPK    60
RDQERDGNRD RNRDRERERE RERDPDRGPR RDTHRDAGPR AGEHGVWEKP RQSRTRDGAR    120
GLTWDAAAPP GPAPWEAPEP PQPQRKGDPG RRRPESEPPS ERYLPSTPRP GREEVEYYQS    180
EAEGLLECHK CKYLCTGRAC CQMLEVLLNL LILACSSVSY SSTGGYTGIT SLGGIYYYQF    240
GGAYSGFDGA DGEKAQQLDV QFYQLKLPMV TVAMACSGAL TALCCLFVAM GVLRVPWHCP    300
LLLVTEGLLD MLIAGGYIPA LYFYFHYLSA AYGSPVCKER QALYQSKGYS GFGCSFHGAD    360
IGAGIFAALG IVVFALGAVL AIKGYRKVRK LKEKPAEMFE F                        401
```

Seq ID NO: C435 Protein Sequence
Protein Accession #: Eos sequence

```
1          11         21         31         41         51
|          |          |          |          |          |
MGAAGRQDFL PKAMLTISWL TLTCFPGATS TVAAGCPDQS PELQPWNPGH DQDHHVHIGQ    60
GKTLLLTSSA TVYSIHISEG GKLVIKDHDE PIVLRTRHIL IDNGGELHAG SALCPFQGNF    120
TIILYGRADE GIQPDPYYGL KYIGVGKGGA LELHGQKKLS WTFLNKTLHP GGMAEGGYFP    180
ERSWGHRGVI VHVIDPKSGT VIHSDRFDTY RSKKESERLV QYLNAVPDGR ILSVAVNDEG    ·240
SRNLDDMARK AMTKLGSKHF LHLGFRHPWS FLTVKGNPSS SVEDHIEYHG HRGSAAARVF    300
KLFQTEHGEY FNVSLSSEWV QDVEWTEWFD HDKVSQTKGG EKISDLWKAH PGKICNRPID    360
IQATTMDGVN LSTEVVYKKG QDYRFACYDR GRACRSYRVR FLCGKPVRPK LTVTIDTNVN    420
STILNLEDNV QSWKPGDTLV IASTDYSMYQ AEEFQVLPCR SCAPNQVKVA GKPMYLHIGE    480
EIDGVDMRAE VGLLSRNIIV MGEMEDKCYP YRNHICNFFD PDTFGGHIKF ALGFKAAHLE    540
GTELKHMGQQ LVGQYPIHFH LAGDVDERGG YDPPTYIRDL SIHHTFSRCV TVHGSNGLLI    600
KDVVGYNSLG HCFPTEDGPE ERNTFDHCLG LLVKSGTLLP SDRDSKMCKM ITEDSYPGYI    660
PKPRQDCNAV STFWMANPNN NLINCAAAGS EETGFWFIFH HVPTGPSVGM YSPGYSEHIP    720
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LGKFYNNRAH SNYRAGMIID NGVKTTEASA KDKRPFLSII SARYSPHQDA DPLKPREPAI    780
IRHFIAYKNQ DHGAWLRGGD VWLDSCHFRG EAQEGFLLTG MKAGGILLGG DEAASGMAQG    840
FSPPCRCLLK LVTTGSPFAH VSLAHS                                        866
```

5

It is understood that the examples described above in no way serve to limit the true scope of this invention, but rather are presented for illustrative purposes. All publications,

5   sequences of accession numbers, and patent applications cited in this specification are herein incorporated by reference as if each individual publication, accession number, or patent application were specifically and individually indicated to be incorporated by reference.

WHAT IS CLAIMED IS:

1   1.   A method for determining the presence or absence of a pathological cell in a

2   patient, said method comprising detecting a nucleic acid comprising a sequence at least 80%

3   identical to a sequence as described in Tables 2A-80 in a biological sample from said patient,

4   thereby determining the presence or absence of said pathological cell.

1   2.   The method of Claim 1, wherein:

2   a) said pathology is described in Table 1, including a cancer; and/or

3   b) said biological sample comprises isolated nucleic acids.

1   3.   The method of Claim 1, wherein said biological sample is tissue from an organ

2   which is affected by said pathology of Table 1, including a cancer.

1   4.   The method of Claim 2, wherein said nucleic acids are mRNA

1   5.   The method of Claim 2:

2   a) further comprising a step of amplifying nucleic acids before said step of detecting

3   said nucleic acid; or

4   b) where said detecting is of a protein encoded by said nucleic acid.

1   6.   The method of Claim 1, wherein said nucleic acid comprises a sequence as

2   described in Tables 2A-80.

1   7.   The method of Claim 2, wherein:

2   a) said detecting step is carried out by:

3   i) using a labeled nucleic acid probe;

4   ii) utilizing a biochip comprising a sequence at least 80% identical to a sequence

5   as described in Tables 2A-80; or

6   iii) detecting a polypeptide encoded by said nucleic acid; or

7   b) said patient is:

8   i) undergoing a therapeutic regimen to treat said pathology of Table 1; or

9   ii) is suspected of having said pathology or cancer.

1   8.   An isolated nucleic acid molecule comprising a sequence as described in

2   Tables 2A-80.

1   9. The nucleic acid molecule of Claim 8, which is labeled.

1   10. An expression vector comprising the nucleic acid of Claim 8.

1   11. A host cell comprising the expression vector of Claim 10.

1   12. An isolated polypeptide which is encoded by a nucleic acid molecule

2 comprising a sequence as described in Tables 2A-80.

1   13. An antibody that specifically binds a polypeptide of Claim 12.

1   14. The antibody of Claim 13:

2 a) conjugated to an effector component;

3 b) conjugated to a detectable label, including a fluorescent label, a radioisotope, or a

4   cytotoxic chemical;

5 c) which is an antibody fragment; or

6 d) which is a humanized antibody.

1   15. A method for specifically targeting a compound to a pathological cell in a

2 patient, said method comprising administering to said patient an antibody of Claim 13,

3 thereby providing said targetting.

1   16. A method for determining the presence or absence of a pathological cell in a

2 patient, said method comprising contacting a biological sample with an antibody of Claim 13.

1   17. The method of Claim 16, wherein:

2 a) said antibody is conjugated to:

3   i) an effector component; or

4   ii) a fluorescent label; or

5 b) said biological sample is a blood, serum, urine, or stool sample.

1   18. A method for identifying a compound that modulates a pathology-associated

2 polypeptide, said method comprising the steps of:

3   a) contacting said compound with a pathology-associated polypeptide, said

4   polypeptide encoded by a polynucleotide that selectively hybridizes to a sequence

5   at least 80% identical to a sequence as described in Tables 2A-80; and

6   b) determining the functional effect of said compound upon said polypeptide.

1   19.   A drug screening assay comprising the steps of:

2   a) administering a test compound to a mammal having a pathology of Table 1 or a

3   cell isolated therefrom; and

4   b) comparing the level of gene expression of a polynucleotide that selectively

5   hybridizes to a sequence at least 80% identical to a sequence as described in

6   Tables 2A-80 in a treated cell or mammal with the level of gene expression of said

7   polynucleotide in a control cell or mammal, wherein a test compound that

8   modulates said level of expression of the polynucleotide is a candidate for the

9   treatment of said pathology.

10

(54) Title: METHODS OF DIAGNOSIS OF CANCER, COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF CANCER

(57) Abstract: Described herein are genes whose expression are up-regulated or down-regulated in specific cancers or other diseases, or are otherwise regulated in disease. Related methods and compositions that can be used for diagnosis, prognosis, and treatment of those medical conditions are disclosed. Also described herein are methods that can be used to identify modulators of these selected conditions.

INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/68; C07H 21/02, 21/04

US CL : 435/6; 536/23.1, 24.3

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6; 536/23.1, 24.3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WEST, PubMed

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SATO, H. et al., Cloning and Expression of a Plasma Membrane Cystine/Gluatamate Exchange Transporter Composed of Two Distinct Proteins, J. Biol. Chem. 23 April 1999, Vol. 247, No. 17, pp. 11455-11458.	1-7
A	KIM, J. Y. et al., Human cystine/glutamate transporter: cDNA cloning and upregulation by oxidative stress n glioma cells, B.B. Acta. June 2001, Vol. 1512, pp. 335-344.	1-7

☐ Further documents are listed in the continuation of Box C.   ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
04 August 2004(04.08.2004)	**13 SEP 2004**
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 872-9306	Authorized officer Teresa Strzelecka Telephone No. (571) 272-1600

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/36810

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claim Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claim Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-7, SEQ ID NO: 19

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-7, drawn to a special technical feature of a method for determining presence or absence of a pathological cell in a patient, said method comprising detecting a nucleic acid comprising a sequence at least 80% identical to a sequence as described in Tables 2A-80 in a biological sample from said patient, thereby determining the presence or absence of said pathological cell.

Group II, claim(s) 8-11, drawn to a special technical feature of an isolated nucleic acid molecule comprising a sequence as described in Tables 2A-80, expression vector comprising the nucleic acid and a host cell comprising the expression vector.

Group III, claim(s) 12, drawn to a special technical feature of an isolated polypeptide which is encoded by an isolated nucleic acid molecule comprising a sequence as described in Tables 2A-80.

Group IV, claim(s) 13, 14, drawn to a special technical feature of an antibody which specifically binds to polypeptide of claim 12.

Group V, claim(s) 15, drawn to a special technical feature of a method for specifically targeting a compound to a pathological cell in a patient, comprising administering to a patient an antibody of claim 13.

Group VI, claim(s) 16, 17, drawn to a special technical feature of a method for determining the presence or absence of a pathological cell in a patient, comprising contacting a biological sample with an antibody of claim 13.

Group VII, claim(s) 18, drawn to a special technical feature of a method for identifying a compound that modulates a pathology-associated polypeptide by contacting the compound with a pathology-associated polypeptide encoded by a polynucleotide which selectively hybridizes to a sequence at least 80% identical to a sequence described in Tables 2A-80 and determining the functional effect of the compound on the polypeptide.

Group VIII, claim(s) 19, drawn to a special technical feature of a drug screening assay comprising the steps of: administering a test compound to a mammal having pathology of Table 1 or a cell isolated therefrom; comparing the level of gene expression of a polynucleotide which selectively hybridizes to a sequence at least 80% identical to a sequence described in Tables 2A-80 in a treated cell or mammal with the level of gene expression of the polynucleotide in a control cell or mammal.

The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: claim 8 is anticipated by a sequence with accession No. BE440042 (Table 2A, first entry) (July 25, 2000), therefore there is no contribution of claim 8 over prior art.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

CORRECTED VERSION

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60/397,775	22 July 2002 (22.07.2002)	US
60/397,845	22 July 2002 (22.07.2002)	US
60/409,450	9 September 2002 (09.09.2002)	US

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— of inventorship (Rule 4.17(iv)) for US only

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(54) Title: METHODS OF DIAGNOSIS OF CANCER, COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF CANCER

(57) Abstract: Described herein are genes whose expression are up-regulated or down-regulated in specific cancers or other diseases, or are otherwise regulated in disease. Related methods and compositions that can be used for diagnosis, prognosis, and treatment of those medical conditions are disclosed. Also described herein are methods that can be used to identify modulators of these selected conditions.